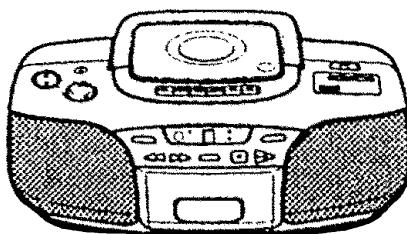




CSD-A170 U(S),K(S),HA(S)
CSD-A110 EZ(S,L),HR(S)
CSD-A100 K(S),EZ(S,L,P),HE(S),HT(S)
CSD-A99 K(S)



SERVICE MANUAL

COMPACT DISC RADIO
CASSETTE RECORDER

BASIC TAPE MECHANISM : ZZM-1 YR2NF
BASIC CD MECHANISM : DA11T3C

This Service Manual is the "Revision Publishing" and replaces "Simple Manual"
CSD-A100 K(S),EZ(S)/A110 EZ(S)/A170 K(S)(S/M Code No. 09-003-342-2T2)
CSD-A170 U(S),HA(S)/A110 EZ(L),HR(S)/A100 HE(S),HT(S),EZ(L,P)/A99 K(S)
(S/M Code No. 09-003-342-2T4).

aiwa
S/M Code No. 09-003-342-2R2

REVISION
DATA

SPECIFICATIONS

HR, HE MODELS

Tuner section

Frequency range, antenna — FM: 87.5 - 108.0 MHz Rod antenna, AM: 530 - 1,605 kHz Ferrite bar antenna

Deck section

Track format — 4 tracks, 2 channels / Frequency range — Normal tape: 50 - 12,500 Hz (EIAJ) / Recording system — AC bias / Erasing system — Magnet erase / Heads — Recording/playback head (1), Erasure head (1)

CD player section

Disc — Compact disc / Scanning method — Non-contact optical scanner (semiconductor laser)

General

Speaker — 100 mm cone type (2) / Output — Headphones jack (stereo mini-jack) / Power output — 2.5 W + 2.5 W (EIAJ 7 ohms, T.H.D. 10%), 1.9 W + 1.9 W (DIN 1% Rated Power) / Power requirements — DC 12 V using eight size C (R14) batteries, AC 110 - 120 V/220 - 240 V switchable, 50/60 Hz / Power consumption — 14 W / Dimensions — 420 (W) × 185 (H) × 250 (D) mm / Weight — 3.45 kg (excluding batteries)

- Design and specifications are subject to change without notice.

K, EZ MODELS

Tuner section

Frequency range, antenna — FM: 87.5 - 108.0 MHz Rod antenna, MW: 530 - 1,605 kHz Ferrite bar antenna, LW: 150 - 285 kHz Ferrite bar antenna

Deck section

Track format — 4 tracks, 2 channels / Frequency range — Normal tape: 50 - 12,500 Hz (EIAJ) / Recording system — AC bias / Erasing system — Magnet erase / Heads — Recording/playback head (1), Erasure head (1)

CD player section

Disc — Compact disc / Scanning method — Non-contact optical scanner (semiconductor laser)

General

Speaker — 100 mm cone type (2) / Output — Headphones jack (stereo mini-jack) / Power output — 2.5 W + 2.5 W (EIAJ 7 ohms, T.H.D. 10%) / DC, 1.9 W + 1.9 W (DIN 1% Rated Power) / Power requirements — DC 12 V using eight size C (R14) batteries, AC 230 V, 50 Hz / Power consumption — 14 W / Dimensions — 420 (W) × 185 (H) × 250 (D) mm / Weight — 3.45 kg (excluding batteries)

- Design and specifications are subject to change without notice.

HA MODEL

Tuner section

Frequency range, antenna — FM: 87.5 - 108.0 MHz Rod antenna, AM: 530 - 1,710 kHz Ferrite bar antenna

Deck section

Track format — 4 tracks, 2 channels / Frequency range — Normal tape: 50 - 12,500 Hz (EIAJ) / Recording system — AC bias / Erasing system — Magnet erase / Heads — Recording/playback head (1), Erasure head (1)

CD player section

Disc — Compact disc / Scanning method — Non-contact optical scanner (semiconductor laser)

General

Speaker — 100 mm cone type (2) / Output — Headphones jack (stereo mini-jack) / Power output — 2.5 W + 2.5 W (EIAJ 7 ohms, T.H.D. 10%), 1.9 W + 1.9 W (DIN 1% Rated Power) / Power requirements — DC 12 V using eight size C (R14) batteries, AC 110 - 120 V/220 - 240 V switchable, 50/60 Hz / Power consumption — 14 W / Dimensions — 420 (W) × 185 (H) × 250 (D) mm / Weight — 3.45 kg (excluding batteries)

- Design and specifications are subject to change without notice.

U MODEL

Tuner section

Frequency range, antenna — FM: 87.5 - 108.0 MHz Rod antenna, AM: 530 - 1,710 kHz Ferrite bar antenna

Deck section

Track format — 4 tracks, 2 channels / Frequency range — Normal tape: 50 - 12,500 Hz (EIAJ) / Recording system — AC bias / Erasing system — Magnet erase / Heads — Recording/playback head (1), Erasure head (1)

CD player section

Disc — Compact disc / Scanning method — Non-contact optical scanner (semiconductor laser)

General

Speaker — 100 mm cone type (2) / Output — Headphones jack (stereo mini-jack) / Power output — 2.5 W + 2.5 W (EIAJ 7 ohms, T.H.D. 10%) / Power requirements — DC 12 V using eight size C (R14) batteries, AC 120 V, 60 Hz / Power consumption — 15 W / Dimensions — 420 (W) × 185 (H) × 250 (D) mm (16⁵/₈ × 7³/₈ × 9⁷/₈ in.) / Weight — 3.45 kg (7 lbs. 10 oz.) (excluding batteries)

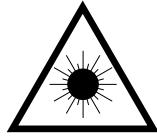
- Design and specifications are subject to change without notice.

PROTECTION OF EYES FROM LASER BEAM DURING SERVICING

This set employs laser. Therefore, be sure to follow carefully the instructions below when servicing.

WARNING!

WHEN SERVICING, DO NOT APPROACH THE LASER EXIT WITH THE EYE TOO CLOSELY. IN CASE IT IS NECESSARY TO CONFIRM LASER BEAM EMISSION. BE SURE TO OBSERVE FROM A DISTANCE OF MORE THAN 30cm FROM THE SURFACE OF THE OBJECTIVE LENS ON THE OPTICAL PICK-UP BLOCK.



- Caution: Invisible laser radiation when open and interlocks defeated avoid exposure to beam.
- Advarsel: Usynlig laserstråling ved åbning, når sikkerhedsafbrydere er ude af funktion. Undgå udsættelse for stråling.

VAROITUS!

Laiteen käyttäminen muulla kuin tässä käyttöohjeessa mainitulla tavalla saattaa altistaa käytäjän turvallisuusluokan 1 ylitäville näkymättömälle lasersäteilylle.

VARNING!

Om apparaten används på annat sätt än vad som specificeras i denna bruksanvisning, kan användaren utsättas för osynlig laserstrålning, som överskriber gränsen för laserklass 1.

CAUTION

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

ATTENTION

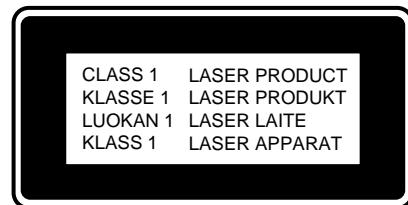
L'utilisation de commandes, réglages ou procédures autres que ceux spécifiés peut entraîner une dangereuse exposition aux radiations.

ADVARSEL!

Usynlig laserstråling ved åbning, når sikkerhedsafbrydere er ude af funktion. Undgå udsættelse for stråling.

This Compact Disc player is classified as a CLASS 1 LASER product.

The CLASS 1 LASER PRODUCT label is located on the rear exterior.

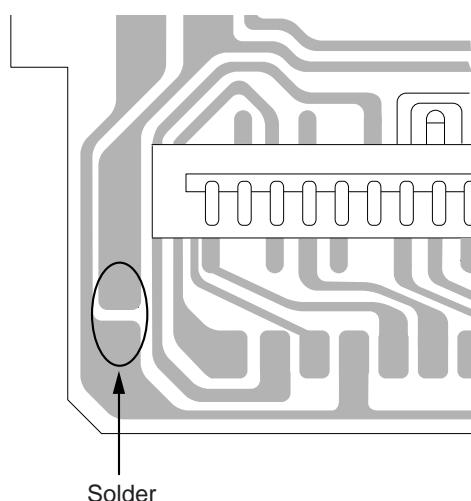


Precaution to replace Optical block

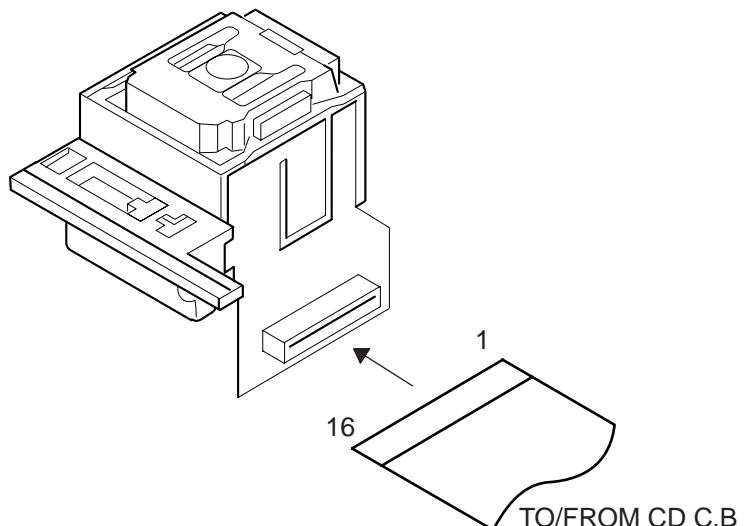
(SF-P101NR)

Body or clothes electrostatic potential could ruin laser diode in the optical block. Be sure ground body and workbench, and use care the clothes do not touch the diode.

- 1) After the connection, remove solder shown in the right figure.



PICK UP ASSY
SF-P101NR



ELECTRICAL MAIN PARTS LIST

DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。
If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

REF. NO	PART NO.	KANRI NO.	DESCRIPTION	REF. NO	PART NO.	KANRI NO.	DESCRIPTION
IC				C247	87-010-401-080	CAP, ELECT 1-50V	
				C248	87-010-401-080	CAP, ELECT 1-50V	
				C310	87-010-248-080	CAP, ELECT 220-10V	
				C316	87-010-263-080	CAP, ELECT 100-10V	
	87-A20-955-010	IC_LA1828		C317	87-015-819-080	CAPACITOR, 0.01	
	87-A21-064-010	IC_LA4227		C322	87-010-260-080	CAP, ELECT 47-25V	
	87-A21-520-040	C-IC,M61509FP	<110HRJ(S),110EZ(S),110EZ(L),170U(S),170K(S),170HA(S)>	C483	87-012-156-080	C-CAP,S 220P-50 CH	
	87-A21-443-040	C-IC,M62495AFP		C484	87-012-156-080	C-CAP,S 220P-50 CH	
<EXCEPT	110HRJ(S),110EZ(S),110EZ(L),170U(S),170K(S),170HA(S)>			C801	87-010-248-080	CAP, ELECT 220-10V	
	87-A20-446-010	C-IC,LA9241ML		C805	87-012-365-080	C-CAP,S 0.027-25VBK	
	87-A20-459-010	C-IC,LC78622ED		C806	87-012-365-080	C-CAP,S 0.027-25VBK	
	87-A21-093-010	IC_LA6541D		C807	87-010-405-080	CAP, ELECT 10-50V	
	8A-CD9-610-010	C-IC,LC865516A-5P16		C808	87-010-405-080	CAP, ELECT 10-50V	
	87-A20-650-010	IC,RPM6938-V11	<170U(S),170K(S),170HA(S)>	C809	87-010-401-080	CAP, ELECT 1-50V	
	87-A21-607-010	IC_NJM14558LD		C810	87-010-401-080	CAP, ELECT 1-50V	
TRANSISTOR				C811	87-010-178-080	CHIP CAP 1000P	
	89-327-143-080	TR,2SC2714 (0.1W)		C812	87-010-178-080	CHIP CAP 1000P	
	87-026-447-080	TR,2SC1740S R		C816	87-010-180-080	C-CER 1500P	
	87-026-463-080	TR,2SA933S (0.3W)		C817	87-010-180-080	C-CER 1500P	
	87-026-213-080	CHIP-TR,DTC114YK		C821	87-010-401-080	CAP, ELECT 1-50V	
	89-318-154-080	TR,2SC1815 (0.4W)		C822	87-010-401-080	CAP, ELECT 1-50V	
	89-112-965-080	TR,2SA1296 (0.75W)		C823	87-010-178-080	CHIP CAP 1000P	
	87-026-291-080	TR,DTC124XS		C824	87-010-178-080	CHIP CAP 1000P	
	89-213-702-010	TR,2SB1370 (1.8W)		C829	87-010-178-080	CHIP CAP 1000P	
	87-026-462-080	TR,2SC1740 S(RS 0.3W)		C830	87-010-178-080	CHIP CAP 1000P	
	89-109-332-380	TR,2SA933RS		C833	87-018-195-080	CAP, CER 1200P-16V	
	89-113-187-080	TR,2SA1318TU		C834	87-010-248-080	CAP, ELECT 220-10V	
	87-026-295-080	TR,DTC144TK		C843	87-010-197-080	CAP, CHIP 0.01 DM	
	89-317-403-080	TR,2SC1740S		C844	87-018-124-080	CAP, CER 270P-50V	
	87-026-239-080	TR,DTC114TK (0.2W)		C845	87-010-178-080	CHIP CAP 1000P	
	87-026-237-080	CHIP-TR,DTC124XK	<170U(S),170K(S),170HA(S)>	C846	87-010-263-080	CAP, ELECT 100-10V	
				C851	87-010-186-080	CAP,CHIP 4700P	
				C852	87-010-178-080	CHIP CAP 1000P	
				C853	87-A11-132-080	CAP,TC U 0.01-50 K B	
	87-026-464-080	TR,DTC114TS (0.3W)		CN201	87-099-018-010	CONN,16P	
DIODE				CN801	87-A60-110-010	CONN,4P V S2M-4W	
				CNA302	8A-CDA-629-010	CONN ASSY,6P MA-TU	
				L801	87-007-342-010	COIL,OSC 85K BIAS	
				SW801	8Z-CD9-609-010	SW,SL 1-6-2 PS62D01	
	87-020-465-080	DIODE,1SS133 (110MA)		CD C.B			
	87-A40-128-080	C-VARI-CAP,HVU202A					
	87-A40-650-080	ZENER,MTZJ6.8A					
	87-070-345-080	DIODE,IN4148					
	87-A40-648-080	ZENER,MTZJ8.2A					
	87-A40-234-080	ZENER,MTZJ5.6A		C30	87-010-260-080	CAP, ELECT 47-25V	
	87-017-978-080	DIODE,1N4003		C251	87-010-404-080	CAP, ELECT 4.7-50V	
	87-017-932-080	ZENER,MTJ6.2B		C261	87-010-402-080	CAP, ELECT 2.2-50V	
	87-A40-465-010	DIODE,FR202		C262	87-010-402-080	CAP, ELECT 2.2-50V	
				C263	87-010-178-080	CHIP CAP 1000P	
MAIN C.B				C264	87-010-178-080	CHIP CAP 1000P	
	C211	87-A11-177-080	C-CAP,S 0.15-16 K B	C265	87-010-263-080	CAP, ELECT 100-10V	
	C212	87-A11-177-080	C-CAP,S 0.15-16 K B	C266	87-010-263-080	CAP, ELECT 100-10V	
	C215	87-016-460-080	C-CAP,S 0.22-16 B	C267	87-010-112-080	CAP, ELECT 100-16V	
	C216	87-016-460-080	C-CAP,S 0.22-16 B	C268	87-010-112-080	CAP, ELECT 100-16V	
	C231	87-010-213-080	C-CAP,S 0.015-50 B	C271	87-010-237-080	CAP, ELECT 1000-16V	
	C232	87-010-213-080	C-CAP,S 0.015-50 B	C272	87-010-237-080	CAP, ELECT 1000-16V	
	C233	87-A10-201-080	C-CAP,S 0.33-16 KB	C278	87-010-405-080	CAP, ELECT 10-50V	
	C234	87-A10-201-080	C-CAP,S 0.33-16 KB	C279	87-010-385-080	CAP, ELECT 220-25V	
	C235	87-016-669-080	C-CAP,S 0.1-25 K B	C301	87-016-495-000	CAP,E 3300-25 M SMG	
	C236	87-016-669-080	C-CAP,S 0.1-25 K B	C306	87-010-404-080	CAP, ELECT 4.7-50V	
	C237	87-010-371-080	CAP, ELECT 470-6.3V	C307	87-010-401-080	CAP, ELECT 1-50V	
	C239	87-010-197-080	CAP, CHIP 0.01 DM	C308	87-010-221-080	CAP, ELECT 470-10V	
		<110HRJ(S),110EZ(S),110EZ(L),170U(S),170K(S),170HA(S)>		C311	87-010-374-080	CAP, ELECT 47-10V	
	C239	87-010-805-080	CAP, S 1-16	C312	87-010-385-080	CAP, ELECT 220-25V	
	<EXCEPT	110HRJ(S),110EZ(S),110EZ(L),170U(S),170K(S),170HA(S)>		C321	87-010-197-080	CAP, CHIP 0.01 DM	
	C240	87-010-197-080	CAP, CHIP 0.01 DM	C322	87-010-263-080	CAP, ELECT 100-10V	
		<110HRJ(S),110EZ(S),110EZ(L),170U(S),170K(S),170HA(S)>		C325	87-010-405-080	CAP, ELECT 10-50V	
	C240	87-010-205-080	CAP, CHIP 0.01 DM	C401	87-010-403-080	CAP, ELECT 3.3-50V	
		<110HRJ(S),110EZ(S),110EZ(L),170U(S),170K(S),170HA(S)>		C402	87-010-197-080	CAP, CHIP 0.01 DM	
	C240	87-010-805-080	CAP, S 1-16	C403	87-010-263-080	CAP, ELECT 100-10V	
	<EXCEPT	110HRJ(S),110EZ(S),110EZ(L),170U(S),170K(S),170HA(S)>		C404	87-010-248-080	CAP, ELECT 220-10V	
				C405	87-010-197-080	CAP, CHIP 0.01 DM	

REF. NO	PART NO.	KANRI NO.	DESCRIPTION	REF. NO	PART NO.	KANRI NO.	DESCRIPTION
C406	87-010-374-080	CAP, ELECT 47-10V		C494	87-010-197-080	CAP, CHIP 0.01 DM	
C407	87-010-178-080	CHIP CAP 1000P		C501	87-012-368-080	C-CAP,S 0.1-50 F	
C408	87-010-198-080	CAP, CHIP 0.022		C502	87-010-322-080	C-CAP,S 100P-50 CH	
C409	87-010-248-080	CAP, ELECT 220-10V		C503	87-010-322-080	C-CAP,S 100P-50 CH	
C410	87-010-263-080	CAP, ELECT 100-10V		C504	87-010-322-080	C-CAP,S 100P-50 CH	
C411	87-A11-177-080	C-CAP,S 0.15-16 K B		C505	87-010-322-080	C-CAP,S 100P-50 CH	
C412	87-010-401-080	CAP, ELECT 1-50V		C506	87-010-322-080	C-CAP,S 100P-50 CH	
C413	87-016-369-080	C-CAP,S 0.033-25 B K		C510	87-016-669-080	C-CAP,S 0.1-25 K B	
C414	87-010-405-080	CAP, ELECT 10-50V		C831	87-010-198-080	CAP, CHIP 0.022	
C416	87-010-545-080	CAP, ELECT 0.22-50V		CN202	8A-CH4-689-010	CONN,3P V 2.5	
C417	87-012-157-080	C-CAP,S 330P-50 CH		CN205	87-A60-109-010	CONN,2P V S2M-2W	
C418	87-010-213-080	C-CAP,S 0.015-50 B		CN301	8A-CH4-689-010	CONN,3P V 2.5	
C419	87-A11-608-080	C-CAP,S 0.33-25 K B		CN401	87-A60-424-010	CONN,16P V TOC-B	
C420	87-016-369-080	C-CAP,S 0.033-25 B K		CN403	87-099-201-010	CONN,8P 6216 H	
C421	87-A11-177-080	C-CAP,S 0.15-16 K B		CN802	8A-CH4-687-010	CONN,4P V 2.5	
C422	87-010-184-080	CHIP CAPACITOR 3300P(K)		CNA402	8A-CDA-625-010	CONN ASSY,6P CD-ME	
C423	87-010-992-080	C-CAP,S 0.047-25 B		L401	87-003-102-080	COIL, 10UH	
C425	87-010-176-080	C-CAP,S 680P-50 SL		L404	87-003-152-080	COIL, 100UH	
C426	87-A11-608-080	C-CAP,S 0.33-25 K B		ΔR840	87-029-124-010	RES,FUSE 2.2-1/4	
C428	87-010-197-080	CAP, CHIP 0.01 DM		SFR430	87-024-437-080	SFR100K,RH063EC	
C429	87-010-186-080	CAP,CHIP 4700P		X401	8Z-CD5-633-010	VIB, CER16.93MHZ FCR16.93M2	
C430	87-012-156-080	C-CAP,S 220P-50 CH		FRONT C.B			
C431	87-010-545-080	CAP, ELECT 0.22-50V		C601	87-010-313-080	CAP, CHIP 18P	
C432	87-010-374-080	CAP, ELECT 47-10V		C602	87-010-315-080	C-CAP,S 27P-50 CH	
C433	87-010-401-080	CAP, ELECT 1-50V		C603	87-010-319-080	C-CAP,S 56P-50 CH	
C434	87-010-184-080	CHIP CAPACITOR 3300P(K)		C604	87-010-317-010	CHIP CAP,S 39P CH	
C435	87-010-197-080	CAP, CHIP 0.01 DM		C605	87-010-264-040	CAP,E 100-10 5L	
C436	87-010-374-080	CAP, ELECT 47-10V		C606	87-012-368-080	C-CAP,S 0.1-50 F	
C437	87-010-404-080	CAP, ELECT 4.7-50V		C607	87-015-779-010	CHIP CAPACITOR, 0.01	
C438	87-016-669-080	C-CAP,S 0.1-25 K B		C608	87-010-415-080	CAP ELE SRE 10-50V	
C439	87-010-178-080	CHIP CAP 1000P		C609	87-010-493-080	CAP,E 0.47-50 GAS	
C440	87-010-145-080	C-CAP,S 1P-50 CH		C610	87-010-178-080	CHIP CAP 1000P <170U(S),170K(S),170HA(S)>	
C441	87-010-197-080	CAP, CHIP 0.01 DM		C611	87-A10-189-040	CAP,E 220-10	
C442	87-010-313-080	CAP, CHIP 18P		C612	87-010-415-080	CAP ELE SRE 10-50V <170U(S),170K(S),170HA(S)>	
C445	87-012-368-080	C-CAP,S 0.1-50 F		C613	87-012-368-080	C-CAP,S 0.1-50 F	
C446	87-012-368-080	C-CAP,S 0.1-50 F		C614	87-010-312-080	C-CAP,S 15P-50 CH	
C447	87-012-368-080	C-CAP,S 0.1-50 F		C627	87-015-779-010	CHIP CAPACITOR, 0.01	
C448	87-010-315-080	C-CAP,S 27P-50 CH		C628	87-015-779-010	CHIP CAPACITOR, 0.01	
C450	87-012-140-080	CAP 470P		C629	87-015-779-010	CHIP CAPACITOR, 0.01	
C451	87-012-156-080	C-CAP,S 220P-50 CH		C630	87-010-264-040	CAP,E 100-10 5L	
C455	87-010-247-080	CAP, ELECT 100-50V		C631	87-015-779-010	CHIP CAPACITOR, 0.01	
C457	87-010-312-080	C-CAP,S 15P-50 CH		CN601	87-099-757-010	CONN,16P 9604S F	
C458	87-010-312-080	C-CAP,S 15P-50 CH		CN602	87-A60-079-010	CONN,08P H 9604S-08F	
C459	87-010-263-080	CAP, ELECT 100-10V		CNA604	8A-CDA-623-010	CONN ASSY,7P KEY	
C460	87-015-819-080	CAPACITOR,0.01		JW603	87-008-372-080	FILTER, EMI BL OIRNI	
C461	87-010-197-080	CAP, CHIP 0.01 DM		JW605	87-003-097-080	COIL,1UH	
C462	87-010-248-080	CAP, ELECT 220-10V		JW606	87-003-097-080	COIL,1UH	
C463	87-010-197-080	CAP, CHIP 0.01 DM		JW608	87-003-097-080	COIL,1UH	
C465	87-010-404-080	CAP, ELECT 4.7-50V		JW627	87-008-372-080	FILTER, EMI BL OIRNI	
C466	87-012-368-080	C-CAP,S 0.1-50 F		JW633	87-003-098-080	COIL,2.2UH	
C467	87-010-263-080	CAP, ELECT 100-10V		L601	87-003-098-080	COIL,2.2UH	
C469	87-012-154-080	C-CAP,S 150P-50 CH		LED602	88-CD6-630-010	LED,934ID RED	
C470	87-010-544-080	CAP, ELECT 0.1-50V		LED608	88-CD6-630-010	LED,934ID RED	
C471	87-015-785-080	CHIP CAPACITOR, 0.1FZ-25Z		LED610	88-CD6-631-010	LED,934GD GRN	
C472	87-015-785-080	CHIP CAPACITOR, 0.1FZ-25Z		<110HRJ(S),110EZ(S),110EZ(L),170U(S),170K(S),170HA(S)>			
C473	87-015-785-080	CHIP CAPACITOR, 0.1FZ-25Z		LED611	87-CD8-616-010	LED,SA36-11 HWA-11.0	
C474	87-015-785-080	CHIP CAPACITOR, 0.1FZ-25Z		S601	87-A91-704-080	SW,TACT EVQ 214 05R	
C475	87-010-197-080	CAP, CHIP 0.01 DM		S602	87-A91-704-080	SW,TACT EVQ 214 05R	
C476	87-010-236-080	CAP,E 1000-10 SME		S603	87-A91-704-080	SW,TACT EVQ 214 05R	
C477	87-010-197-080	CAP, CHIP 0.01 DM		S604	87-A91-704-080	SW,TACT EVQ 214 05R	
C478	87-010-263-080	CAP, ELECT 100-10V		S605	87-A91-704-080	SW,TACT EVQ 214 05R	
C479	87-010-197-080	CAP, CHIP 0.01 DM		S609	87-A91-704-080	SW,TACT EVQ 214 05R	
C480	87-010-221-080	CAP, ELECT 470-10V		S611	87-A91-704-080	SW,TACT EVQ 214 05R	
C481	87-010-405-080	CAP, ELECT 10-50V		X601	87-030-273-010	VIB,XTAL 32.768K5PPM	
C482	87-010-405-080	CAP, ELECT 10-50V		X602	87-030-376-080	VIB,CER CSA5.76MG200	
C489	87-012-368-080	C-CAP,S 0.1-50 F					
C490	87-012-368-080	C-CAP,S 0.1-50 F					
C491	87-010-197-080	CAP, CHIP 0.01 DM					
C492	87-010-221-080	CAP, ELECT 470-10V					
C493	87-010-180-080	C-CER 1500P<170U(S)>					

REF. NO	PART NO.	KANRI NO.	DESCRIPTION	REF. NO	PART NO.	KANRI NO.	DESCRIPTION					
TUNER C.B												
C1	87-010-314-080	C-CAP, S 22P-50V		L17	87-A50-337-010	COIL, AM OSC (TOKO)						
C2	87-010-316-080	C-CAP, S 33P-50 CH		S1	87-A91-548-010	<EXCEPT 110HRJ(S), 100HRJ(S), 170U(S), 170HA(S)> SW, SL-2-3 SK23E01G06						
C3	87-010-314-080	C-CAP, S 22P-50V		S1	87-A91-549-010	<110HRJ(S), 100HRJ(S), 170U(S), 170HA(S)> SW, SL-6-4 SK64D01G06						
C4	87-010-148-080	CAP, CHIP S 4P SL		TC5	87-011-253-080	<EXCEPT 110HRJ(S), 100HRJ(S), 170U(S), 170HA(S)> TRIMER, 30P LAR						
C5	87-010-378-080	CAP, ELECT 10-16V	<110HRJ(S), 100HRJ(S), 170U(S), 170HA(S)>	TC6	87-011-253-080	<EXCEPT 110HRJ(S), 100HRJ(S), 170U(S), 170HA(S)> TRIMER, 30P LAR						
C7	87-012-156-080	C-CAP, S 220P-50 CH		VC1	87-A91-635-010	<EXCEPT 110HRJ(S), 100HRJ(S), 170U(S), 170HA(S)> TUN-CAP, 20P-140P E-ACD(MITSUMI)						
C8	87-010-197-080	CAP, CHIP 0.01 DM		VC1	87-A91-167-010	<EXCEPT 100HE(S), 170U(S), 170HA(S)> TUN-CAP, 20P-160P FA-22125 N000						
C9	87-010-311-080	CAP 12P		VC1	87-A91-170-010	<170U(S), 170HA(S)> TUN-CAP, 20P-335P FA-2217 N000- <100HE(S)>						
C10	87-010-197-080	CAP, CHIP 0.01 DM		HP C.B								
C11	87-010-152-080	C-CAP, S 8P-50 CH		CN204	87-A60-685-010	CONN, 4P H WHT EH						
C12	87-010-314-080	C-CAP, S 22P-50V		CN605	87-A60-117-010	CONN, 7P H S2M-7WR						
C13	87-010-322-080	C-CAP, S 100P-50 CH		CNA203	8A-CDA-628-010	CONN ASSY, 4P MA-HP						
C14	87-010-148-080	CAP, CHIP S 4P SL		J251	87-A60-569-010	JACK, HTJ-035-18						
C15	87-016-669-080	C-CAP, S 0.1-25 K B		LED606	88-CD6-630-010	LED, 934ID RED						
C16	87-010-178-080	CHIP CAP 1000P		LED607	88-CD6-630-010	LED, 934ID RED						
C17	87-016-669-080	C-CAP, S 0.1-25 K B		S606	87-A91-704-080	SW, TACT EVQ 214 05R						
C18	87-010-198-080	CAP, CHIP 0.022		S607	87-A91-704-080	SW, TACT EVQ 214 05R						
C19	87-016-669-080	C-CAP, S 0.1-25 K B		S608	87-A91-704-080	SW, TACT EVQ 214 05R						
C20	87-010-400-080	CAP, ELECT 0.47-50V		S614	87-A91-704-080	SW, TACT EVQ 214 05R						
C21	87-010-403-080	CAP, ELECT 3.3-50V		S615	87-A91-704-080	SW, TACT EVQ 214 05R						
C22	87-010-197-080	CAP, CHIP 0.01 DM		BATT1 C.B								
C24	87-010-197-080	CAP, CHIP 0.01 DM		C901	87-010-192-080	C-CAP, S 0.022-50 F						
C25	87-010-197-080	CAP, CHIP 0.01 DM		C902	87-010-192-080	C-CAP, S 0.022-50 F						
C26	87-012-358-080	C-CAP, S 0.47-10 F Z		C903	87-010-192-080	C-CAP, S 0.022-50 F						
C27	87-012-358-080	C-CAP, S 0.47-10 F Z		C904	87-010-192-080	C-CAP, S 0.022-50 F						
C28	87-010-992-080	C-CAP, S 0.047-25 B		CNA901	8A-CDA-627-010	CONN ASSY, 3P PWR						
C29	87-010-992-080	C-CAP, S 0.047-25 B		APR901	87-A90-092-080	PROTECTOR, 2.5A 491						
C30	87-010-248-080	CAP, ELECT 220-10V		SP901	87-CD6-213-010	SPR-C, BATT (-)						
C31	87-010-379-080	CAP, ELECT 22-16V		SP902	87-CD6-213-010	SPR-C, BATT (-)						
C32	87-010-197-080	CAP, CHIP 0.01 DM		BATT2 C.B								
C33	87-010-197-080	CAP, CHIP 0.01 DM		SP903	87-CD6-213-010	SPR-C, BATT (-)						
C34	87-010-197-080	CAP, CHIP 0.01 DM		SP904	87-CD6-213-010	SPR-C, BATT (-)						
C35	87-010-197-080	CAP, CHIP 0.01 DM		MOTOR C.B								
C36	87-010-263-080	CAP, ELECT 100-10V		M2	9X-262-576-910	MOTOR GEAR ASSY						
C37	87-010-197-080	CAP, CHIP 0.01 DM		PIN3	91-564-722-110	CONNECTOR 6P						
C38	87-010-197-080	CAP, CHIP 0.01 DM		SW1	91-572-085-120	LEAF SW						
C39	87-010-197-080	CAP, CHIP 0.01 DM		VOL SEL C.B<170HA(S)>								
	<110HRJ(S), 100HRJ(S), 170U(S), 170HA(S)>				A							
C40	87-010-150-080	C-CAP, S 6P-50 CH		APR901	87-A90-092-080	FUSE, 2.5A 250V T<170HA(S)>						
	<EXCEPT 110HRJ(S), 100HRJ(S), 170U(S), 170HA(S)>				FC901	87-035-347-010	CLAMP, FUSE SMK<170HA(S)>					
C41	87-010-321-080	CHIP CAPACITOR, 82P(J)		FC902	87-033-213-010	CLAMP, FUSE SMK<170HA(S)>						
C42	87-010-150-080	C-CAP, S 6P-50 CH										
	<EXCEPT 110HRJ(S), 100HRJ(S), 170U(S), 170HA(S)>											
C44	87-012-140-080	CAP 470P										
	<EXCEPT 110HRJ(S), 100HRJ(S), 170U(S), 170HA(S)>											
C51	87-010-197-080	CAP, CHIP 0.01 DM										
C56	87-010-152-080	C-CAP, S 8P-50 CH										
	<110HRJ(S), 100HRJ(S), 170U(S), 170HA(S)>											
CF1	87-A90-128-010	FLTR, AM IF CFAL-455										
CF2	87-008-261-010	FILTER, SFE10.7MA5-A										
CF3	87-008-261-010	FILTER, SFE10.7MA5-A										
CN2	87-A60-116-010	CONN, 6P H S2M-6WR										
L2	87-A50-560-010	COIL, FM BPF(ACD)										
L3	8A-CD9-660-010	BAR-ANT, MW 2B-ACD(COI)										
	<110HRJ(S), 100HRJ(S), 170U(S), 170HA(S)>											
L3	8A-CD9-661-010	BAR-ANT, MW/LW 3B-ACD(COI)										
	<EXCEPT 110HRJ(S), 100HRJ(S), 170U(S), 170HA(S)>											
L4	87-A50-562-010	COIL, FM RF EX(ACD)										
L5	87-A50-564-010	COIL, FM OSC EX(ACD)										
L6	87-A50-337-010	COIL, AM OSC (TOKO)										
	<110HRJ(S), 100HRJ(S), 170U(S), 170HA(S)>											
L7	87-A50-579-010	COIL, AM IPT(ACD)										
L8	87-A50-335-010	COIL, FM IFT (TOKO)										
L9	87-A50-577-010	COIL, FM DET(ACD)										
L10	87-005-849-080	COIL, 10UH(CECS)										
L16	87-A50-569-010	COIL, LW OSC-ACD(COI)										
	<EXCEPT 110HRJ(S), 100HRJ(S), 170U(S), 170HA(S)>											

WIRING-1 (MAIN/CD)

1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |

A

B

6

1

1

□

B C D E

TO C FRONT C.B
CN602

SW205

FC403
1 3 5 7 8

CNA205

TO CN403 TO CN205

TO G BATT1 C.B
CNA

CO HP C. B
CNA2

A MAIN C.E.

SW801

PB

REC

6
5
4
3
2
1

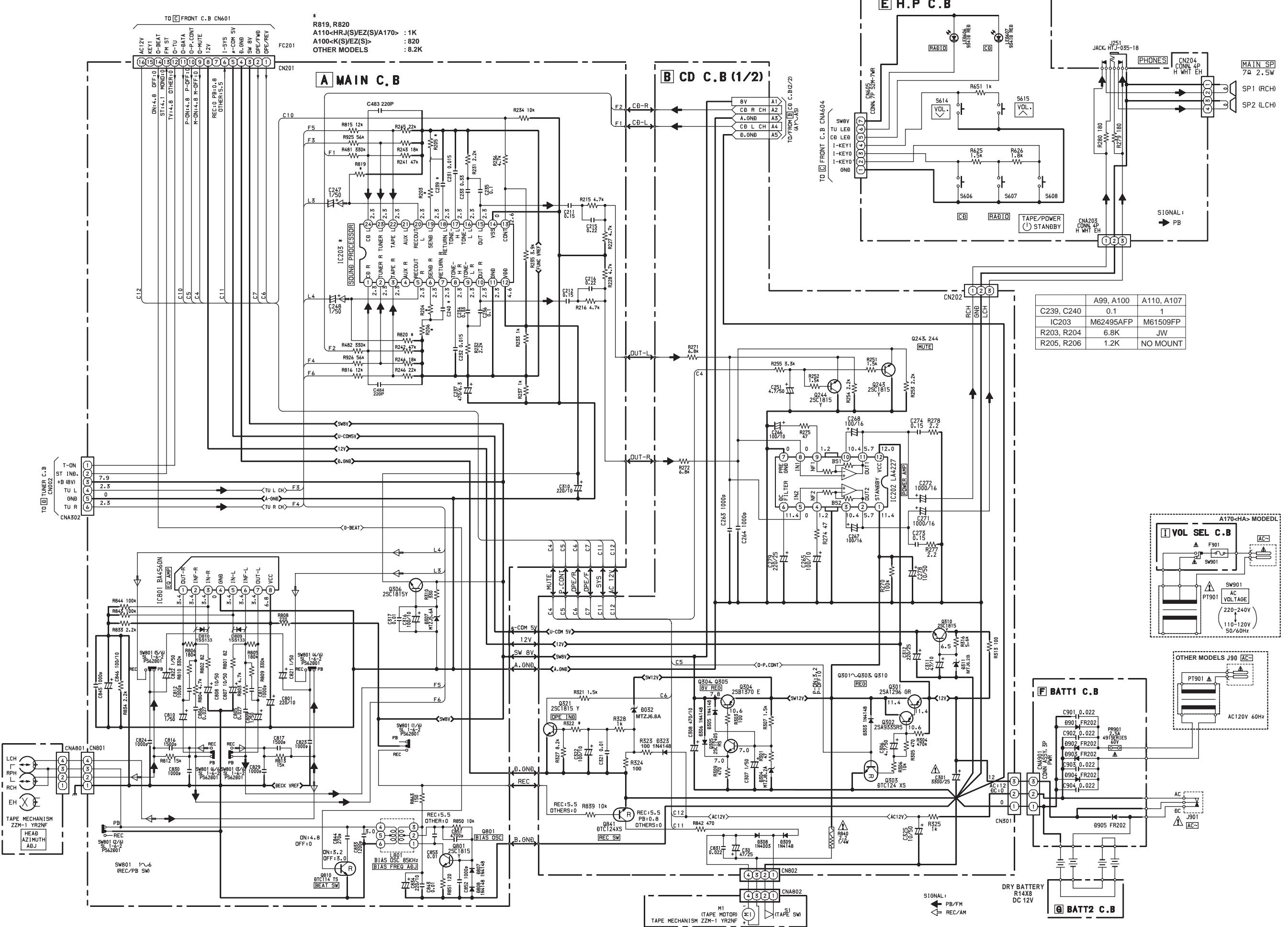
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[CNA402]
TO H MOTOR C.B
(CD MECHANISM DA11T3C)

(CD MECHANISM DA11T3C)

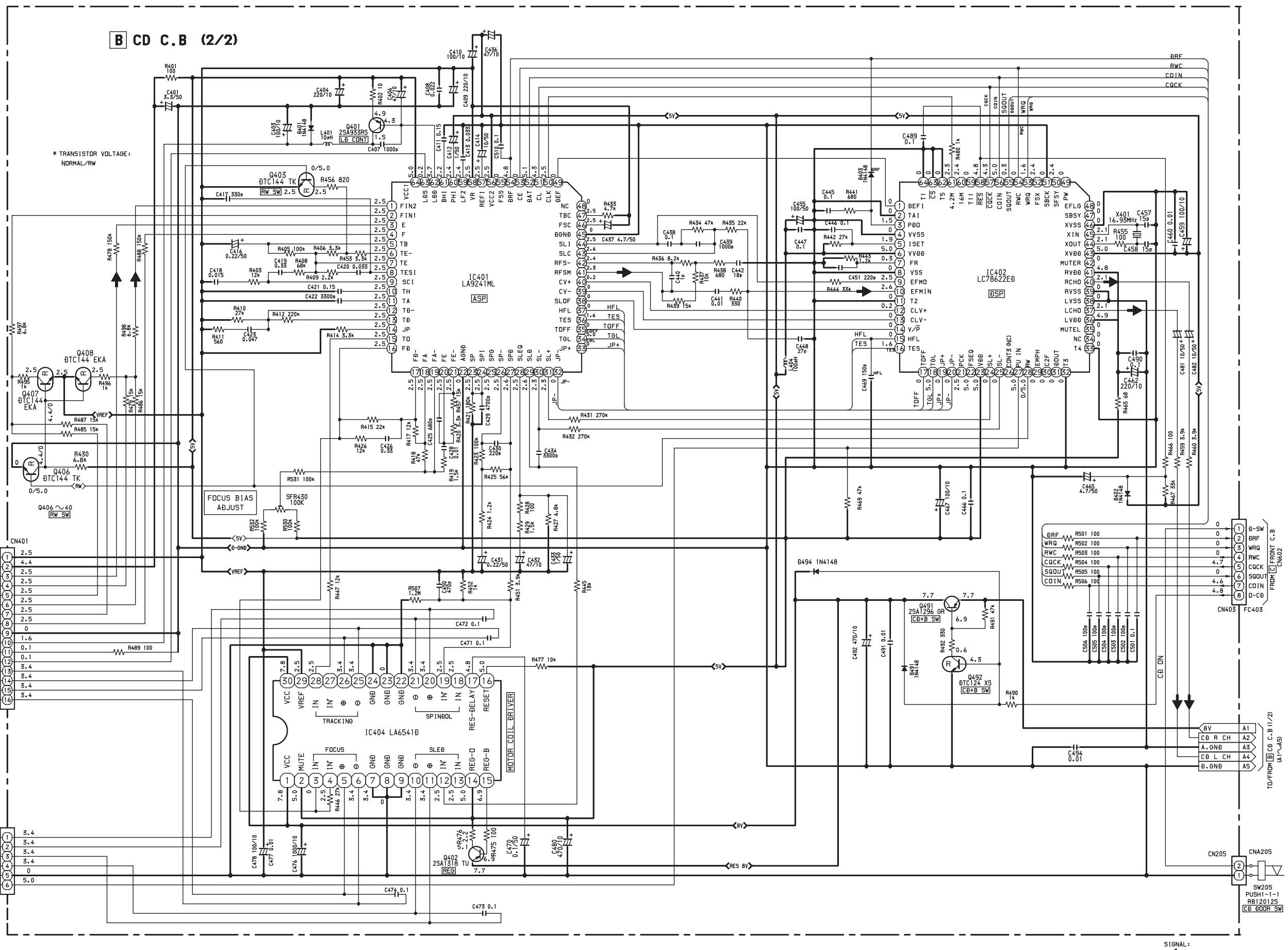
TO CD

TO TUNER C.B CN002
CNA302
1 3 5 6

SCHEMATIC DIAGRAM-1 (MAIN)

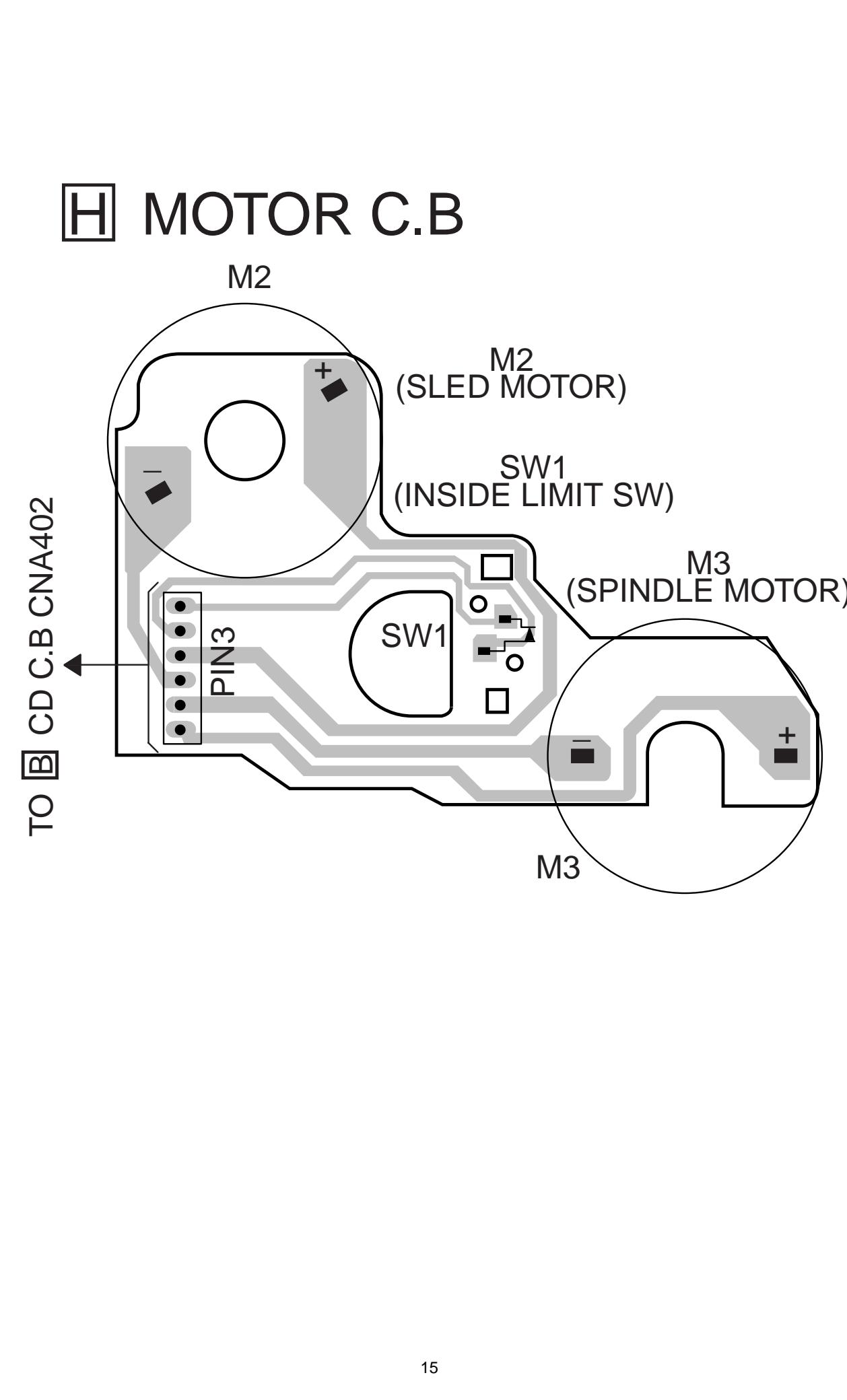


SCHEMATIC DIAGRAM-2 (CD)

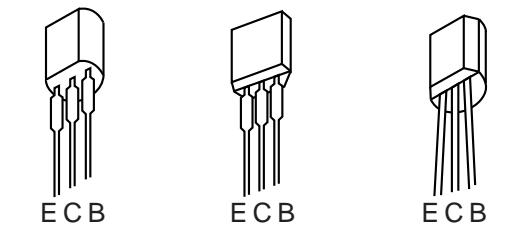


WIRING-2 (MOTOR)

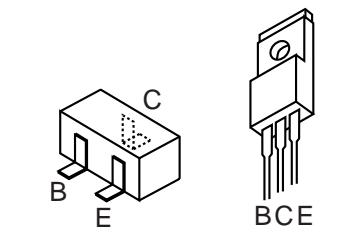
1 | 2 | 3 | 4 | 5 | 6 | 7 |



TRANSISTOR ILLUSTRATION

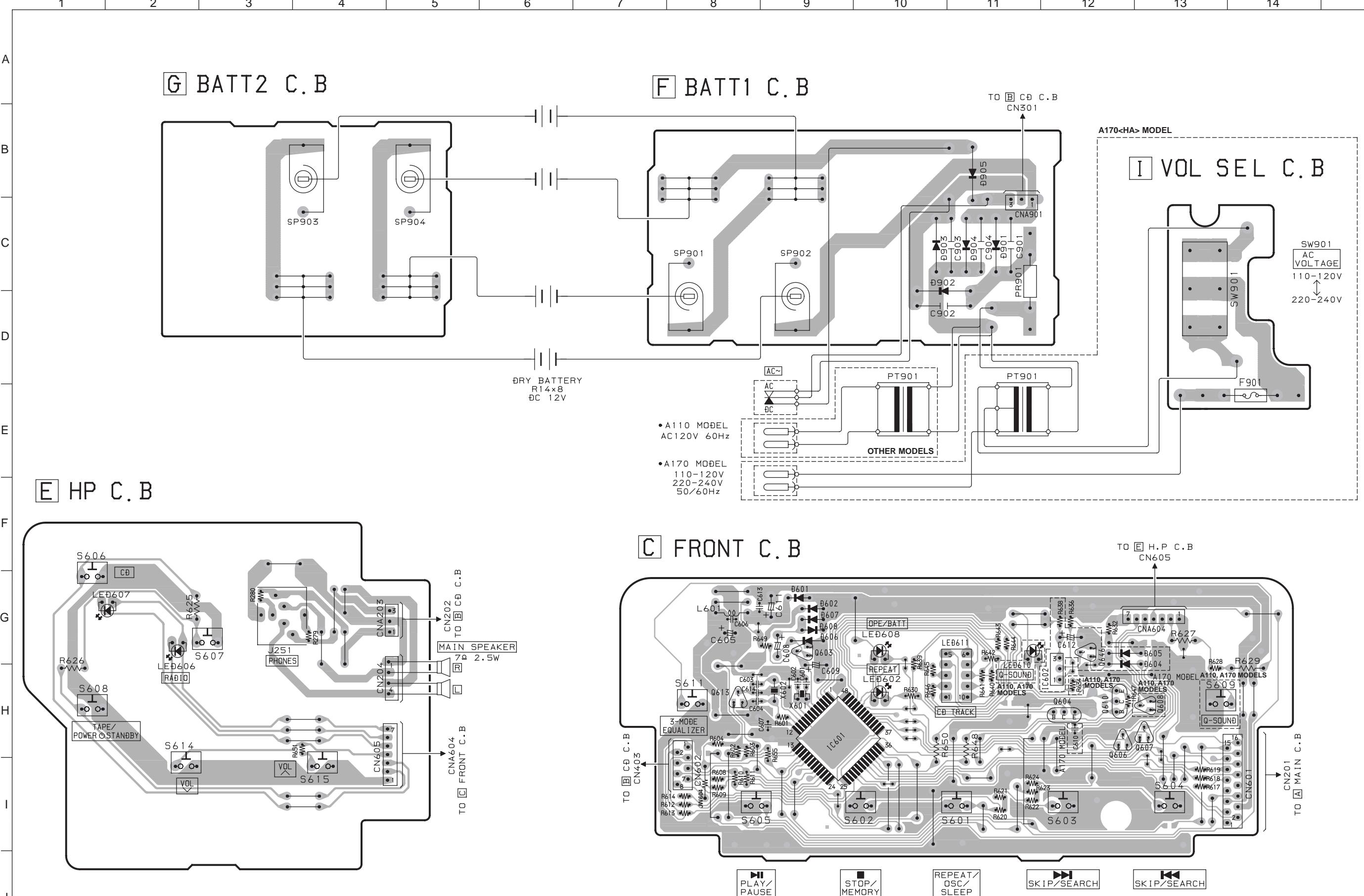


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2SC1815
2SA933
2SC1740
DTC114TS
DTC124XS
2SA1318

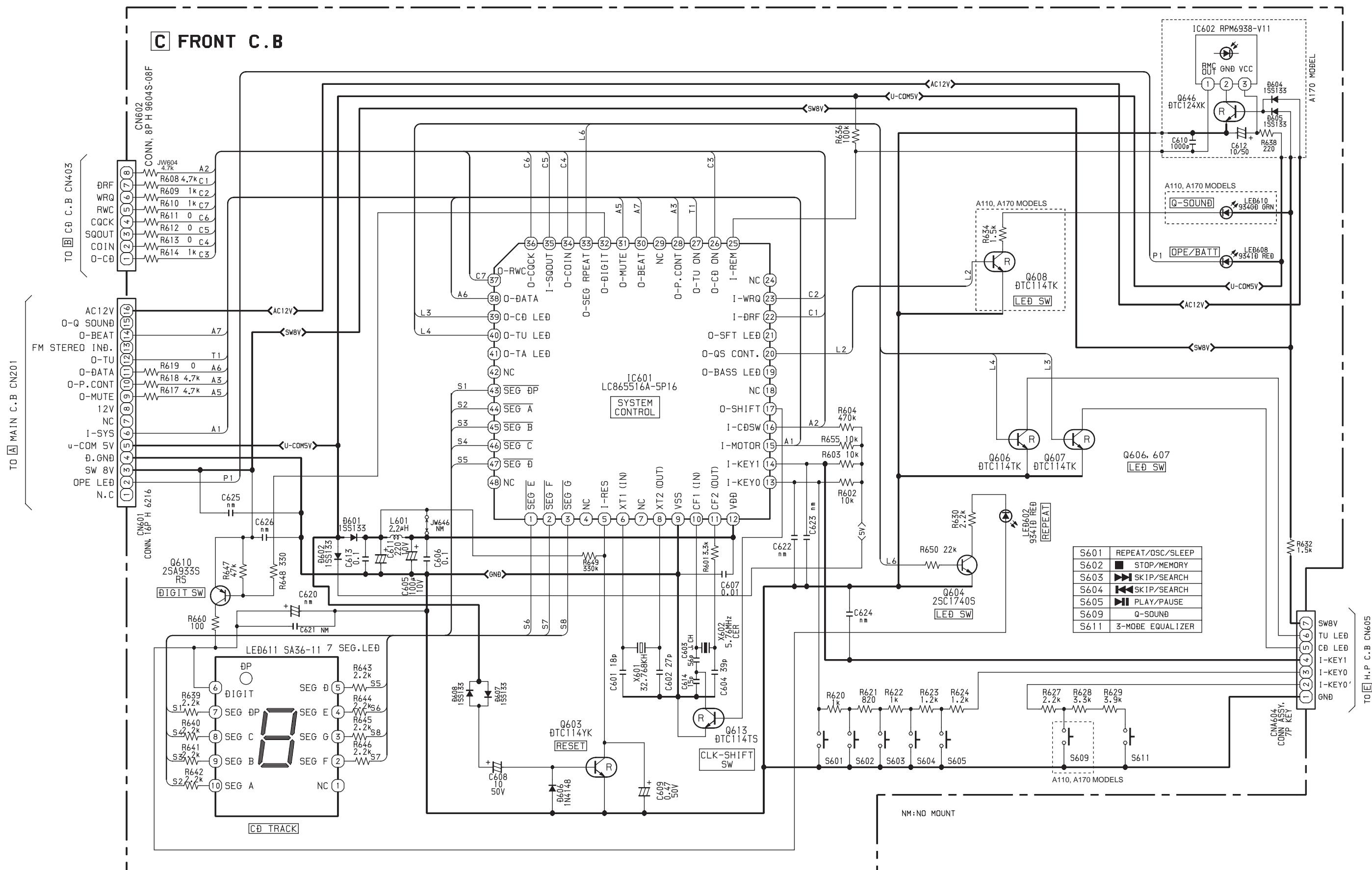


2SC2714
DTC114TK
DTC114YK
DTC124XX
DTC144TK
2SB1370

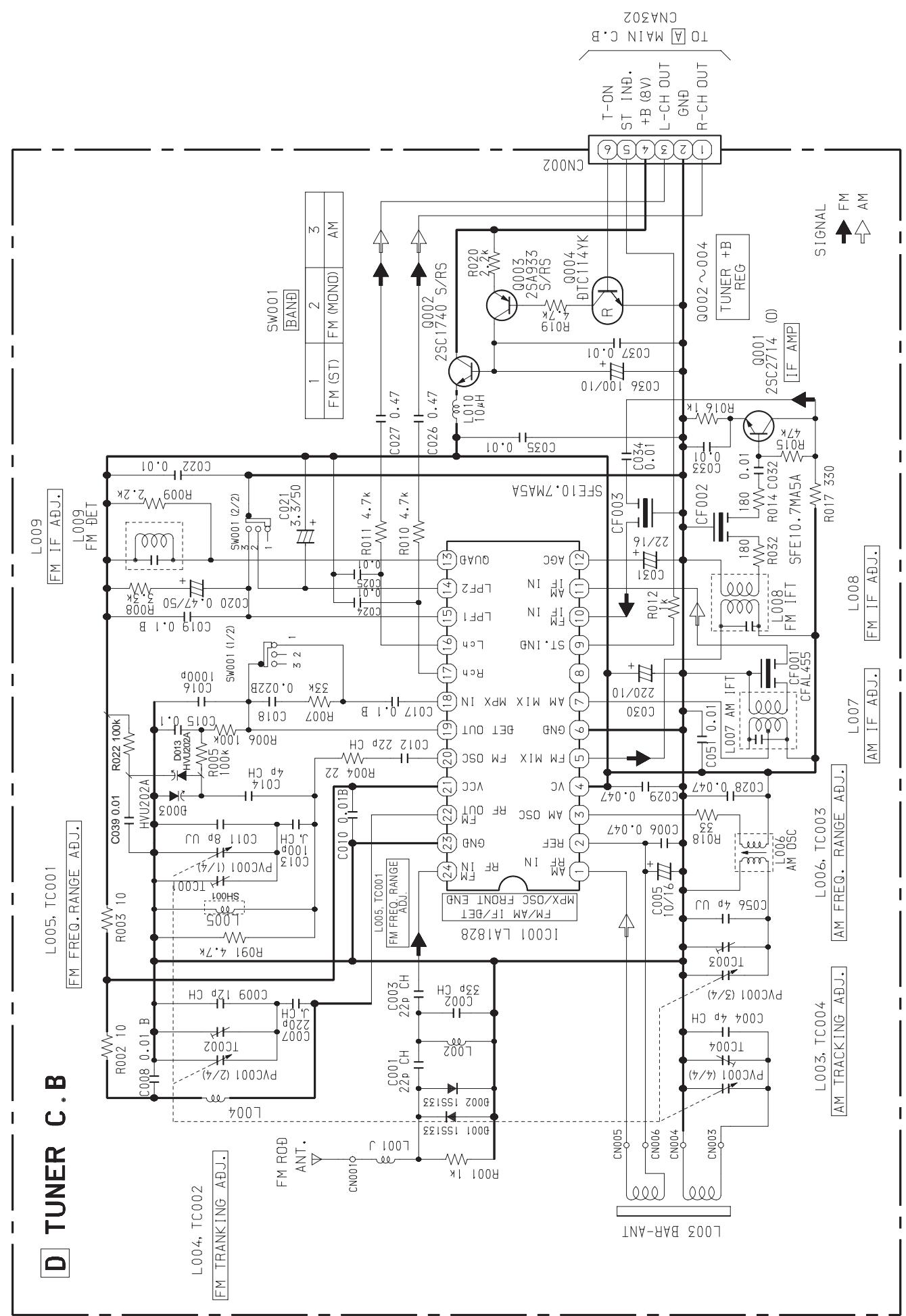
WIRING-3 (FRONT/HP/BATT1/BATT2)



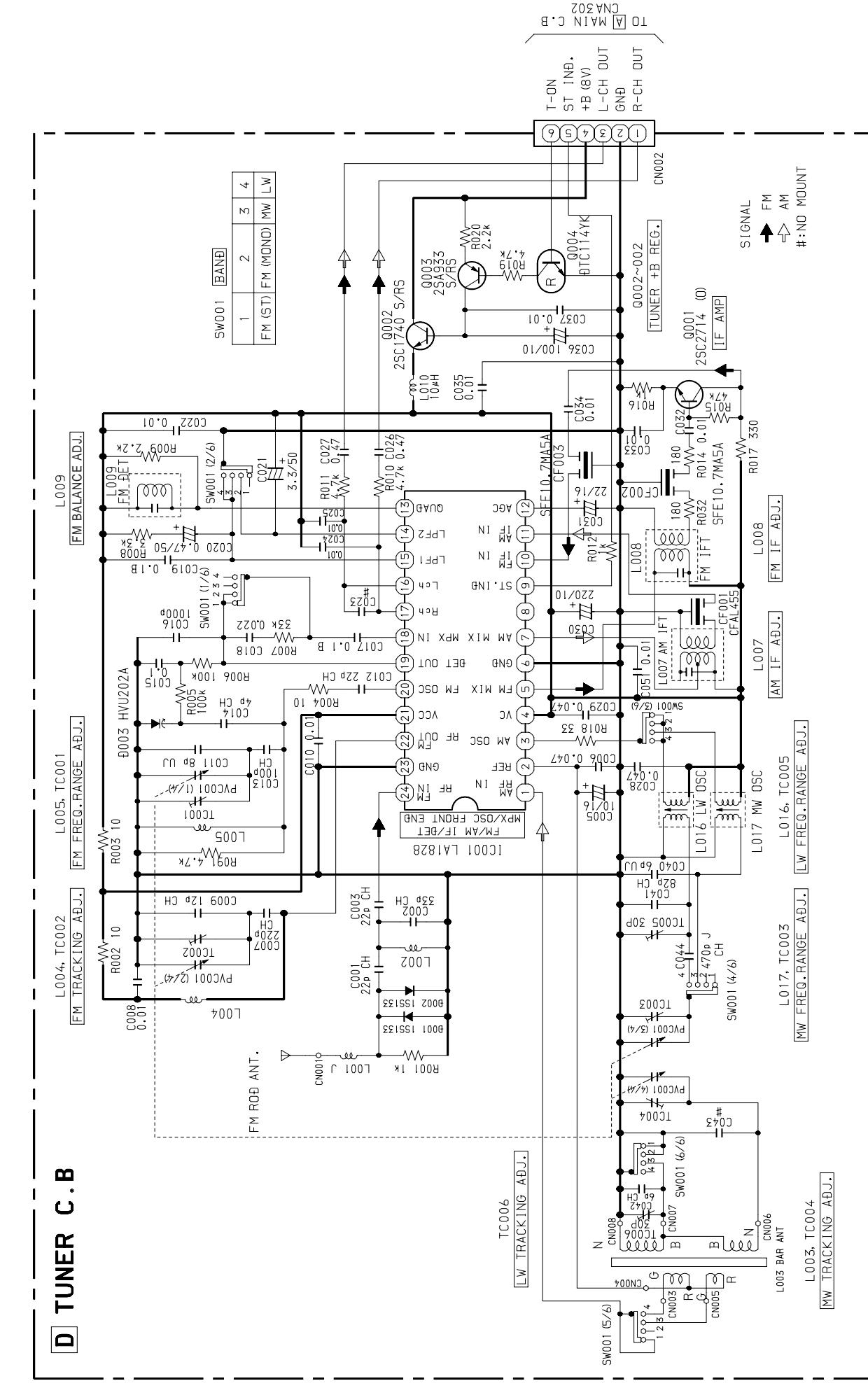
SCHEMATIC DIAGRAM-3 (FRONT)



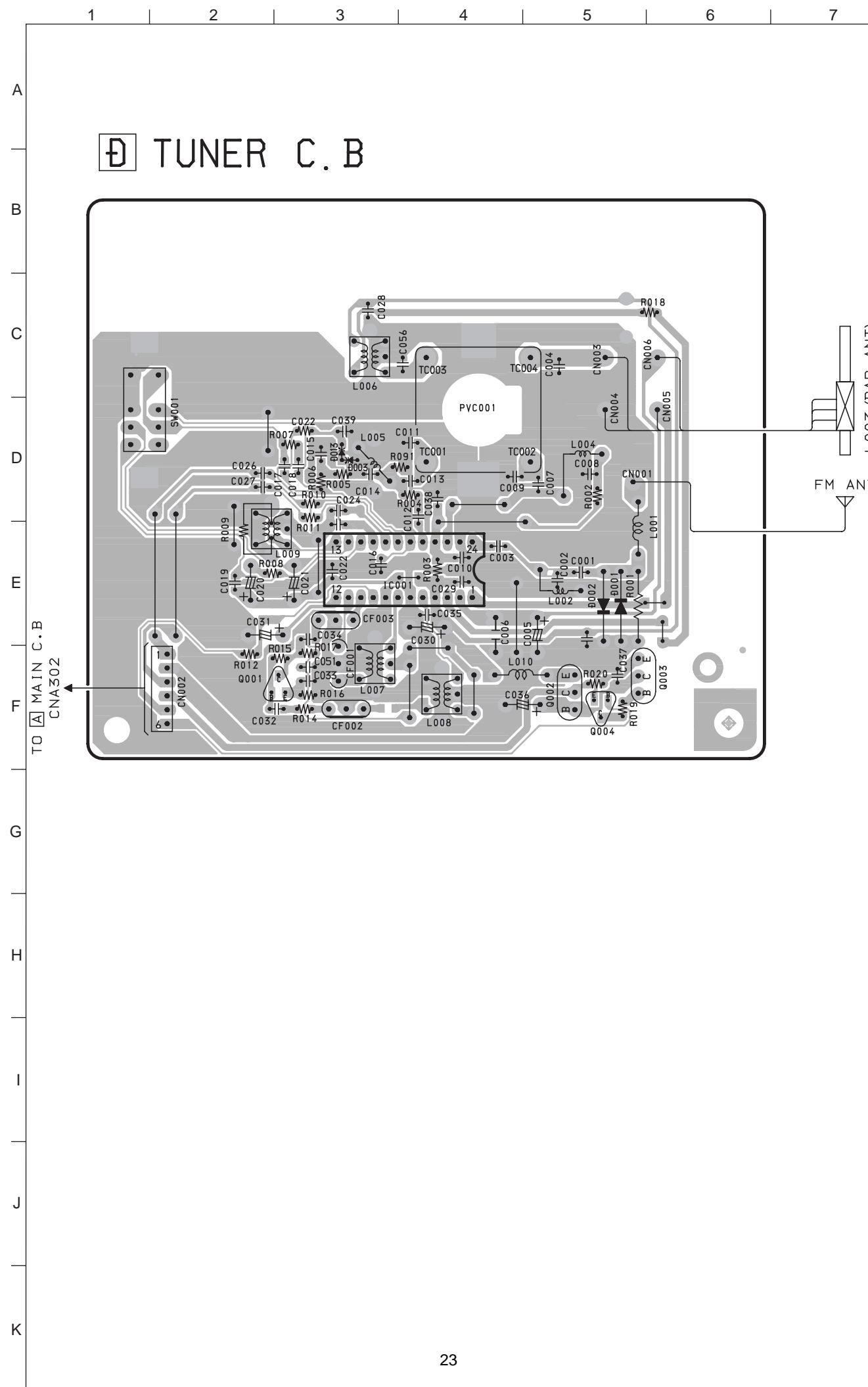
SCHEMATIC DIAGRAM-4 (TUMER: HA, HE, HR, U)



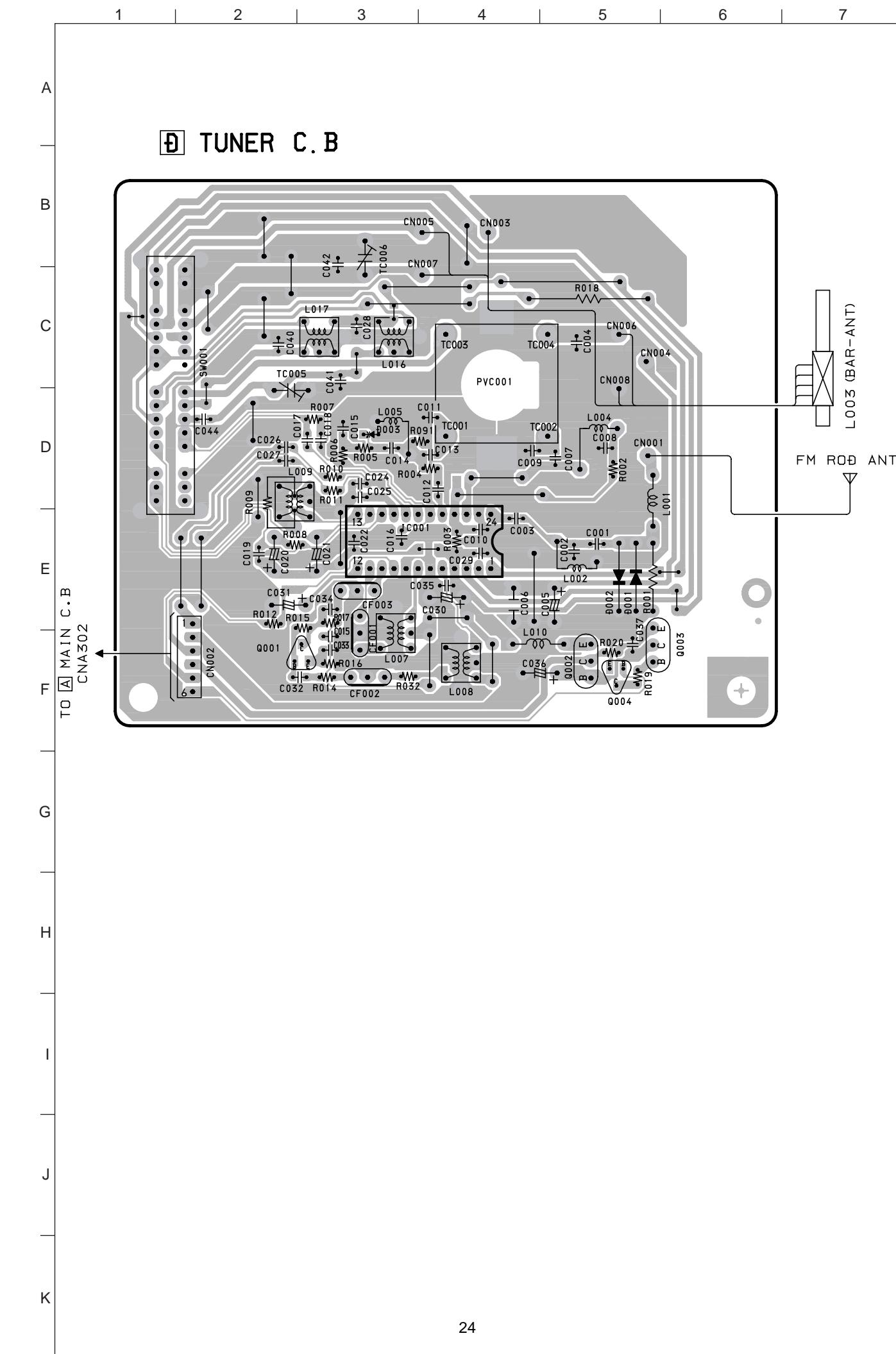
SCHEMATIC DIAGRAM-5 (TUMER: K, EZ)



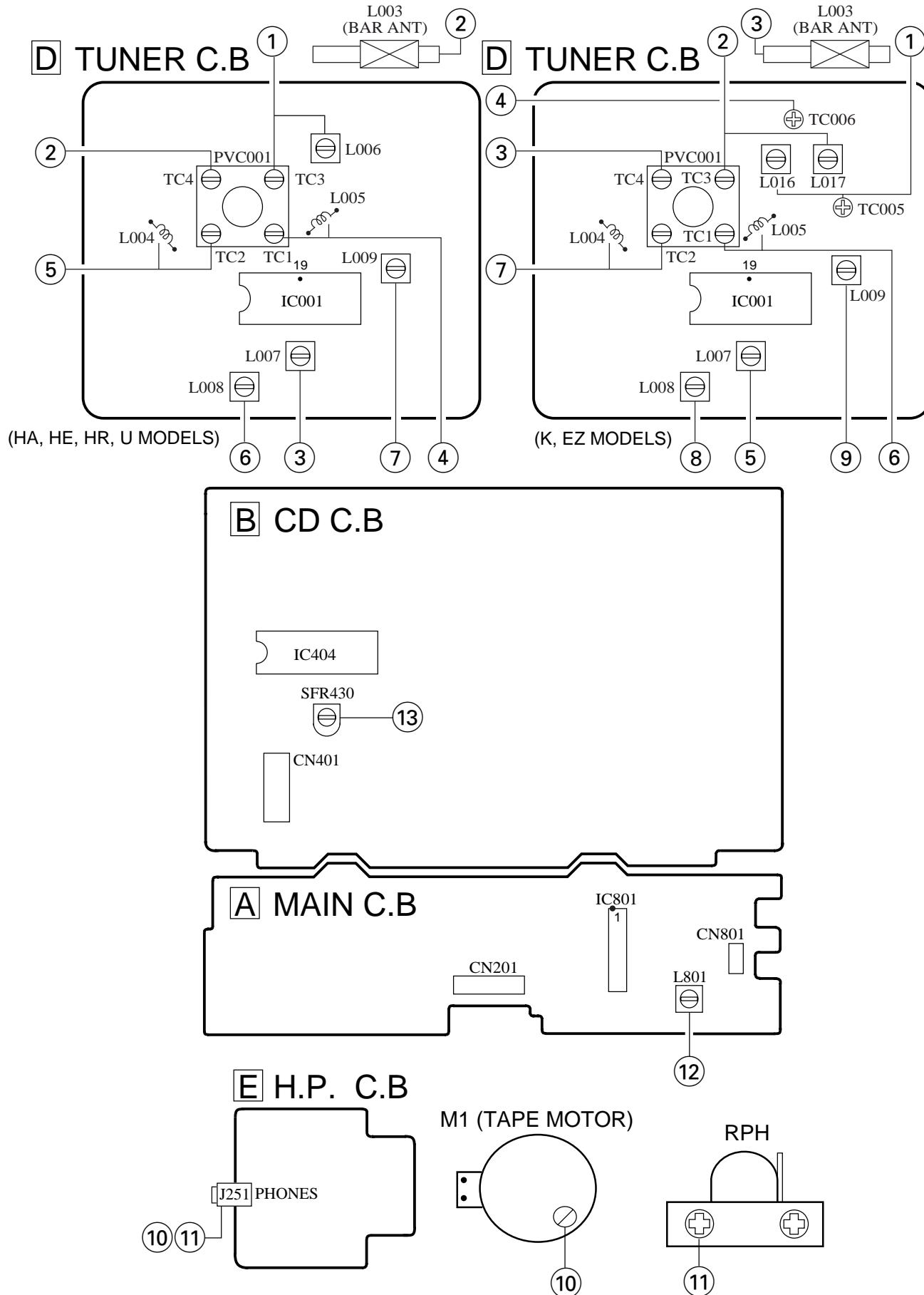
WIRING-4 (TUNER:HA, HE, HR, U)



WIRING-5 (TUNER: K, EZ)



ELECTRICAL ADJUSTMENT



< TUNER SECTION >

(HA, HE, HR, U MODELS)

1. AM Freq. Range Adjustment
L006 517kHz
TC003 1750kHz

2. AM Tracking Adjustment
L003 600kHz
TC004 1400kHz

3. AM IF Adjustment
Settings: • Test point: IC001 (LA1828) 19PIN
• Adjustment location: L007
Method: Adjust L007 so that the output level at 1400kHz becomes maximum.

4. FM Freq. Range Adjustment
L005 87.0MHz
TC001 109.0MHz

5. FM Tracking Adjustment
L004 88.0MHz
TC002 108.0MHz

6. FM IF Adjustment
Settings: • Test point: IC001 (LA1828) 19PIN
• Adjustment location: L008
Method: Adjust L008 so that the output level at 98.0MHz becomes balanced.

7. FM Balance Adjustment
Settings: • Test point: IC001 (LA1828) 19PIN
• Adjustment location: L009
Method: Adjust L009 so that the output level at 98.0MHz becomes balanced.

(K, EZ MODELS)

1. LW Freq. Range Adjustment
L016 145kHz
TC005 295kHz

2. MW Freq. Range Adjustment
L017 515kHz
TC003 1635kHz

3. MW Tracking Adjustment
L003 600kHz
TC004 1400kHz

4. LW Tracking Adjustment
TC006 288kHz

5. AM IF Adjustment
Settings: • Test point: IC001 (LA1828) 19PIN
• Adjustment location: L007
Method: Adjust L007 so that the output level at 1400kHz becomes maximum.

6. FM Freq. Range Adjustment
L005 87.4MHz
TC001 108.3MHz

7. FM Tracking Adjustment

L004 88.0MHz
TC002 108.0MHz

8. FM IF Adjustment

Settings: • Test point: IC001 (LA1828) 19PIN
• Adjustment location: L008
Method: Adjust L008 so that the output level at 98.0MHz becomes balanced.

9. FM Balance Adjustment

Settings: • Test point: IC001 (LA1828) 19PIN
• Adjustment location: L009
Method: Adjust L009 so that the output level at 98.0MHz becomes balanced.

< DECK SECTION >

10. Tape Speed Adjustment

Settings: • Test tape : TTA-100
• Test point : J251 (PHONES jack)
• Adjustment location : SFR of deck motor
Method: Play back the test tape and adjust SFR so that the frequency counter reads $3000\text{Hz} \pm 30\text{Hz}$.

11. Head Azimuth Adjustment

Settings: • Test tape : TTA-320
• Test point : J251 (PHONES jack)
• Adjustment location : Azimuth adjustment screw
Method: Play back the 8kHz signal of the test tape and adjust screw so that the output becomes maximum.

12. Bias frequency Adjustment

L801 $85\text{kHz} \pm 0.5\text{kHz}$

< CD SECTION >

13. FE Balance Adjustment

Settings: • Test point : IC401 PIN58 (VR), IC401 PIN 20 (FE)
• Adjustment location : SFR430
Method: Playback the disc and adjust SFR430 so that the test point voltage becomes 0V.

IC DESCRIPTION

IC, LA9241ML

Pin No.	Pin Name	I/O	Description
1	FIN2	I	Pin to which external pickup photo diode is connected. RF signal is created by adding with the FIN1 pin signal. FE signal is created by subtracting from the FIN1 pin signal.
2	FIN1	I	Pin to which external pickup photo diode is connected.
3	E	I	Pin to which external pickup photo diode is connected. TE signal is created by subtracting from the F pin signal.
4	F	I	Pin to which external pickup photo diode is connected.
5	TB	I	DC component of the TE signal is input.
6	TE-	I	Pin to which external resistor setting the TE signal gain is connected between the TE pin.
7	TE	O	TE signal output pin.
8	TESI	I	TES “Track Error Sense” comparator input pin. TE signal is passed through a band-pass filter then input.
9	SCI	I	Shock detection signal input pin.
10	TH	I	Tracking gain time constant setting pin.
11	TA	O	TA amplifier output pin.
12	TD-	I	Pin to which external tracking phase compensation constants are connected between the TD and VR pins.
13	TD	I	Tracking phase compensation setting pin.
14	JP	I	Tracking jump signal (kick pulse) amplitude setting pin.
15	TO	O	Tracking control signal output pin.
16	FD	O	Focusing control signal output pin.
17	FD-	I	Pin to which external focusing phase compensation constants are connected between the FD and FA pins.
18	FA	I	Pin to which external focusing phase compensation constants are connected between the FD- and FA- pins.
19	FA-	I	Pin to which external focusing phase compensation constants are connected between the FA and FE pins.
20	FE	O	FE signal output pin.
21	FE-	I	Pin to which external FE signal gain setting resistor is connected between the FE pin.
22	AGND	—	Analog signal GND.
23	SP	O	Signal ended output of the CV+and CV- pin input signal.
24	SPI	I	Spindle amp input.
25	SPG	I	Pin to which external spindle gain setting resistor in 12 cm mode is connected.
26	SP-	I	Pin to which external spindle phase compensation constants are connected together with SPD pin.
27	SPD	O	Spindle control signal output pin.
28	SLEQ	I	Pin to which external sled phase compensation constants are connected.
29	SLD	O	Sled control signal output pin.
30, 31	SL-, SL+	I	Sled advance signal input pin from microprocessor.
32, 33	JP-, JP+	I	Tracking jump signal input pin from DSP.
34	TGL	I	Tracking gain control signal input from DSP. Low gain when TGL = H.
35	TOFF	I	Tracking off control signal input pin from DSP. Off when TOFF = H.

Pin No.	Pin Name	I/O	Description
36	TES	O	Pin from which TES signal is output to DSP.
37	HFL	O	“High Frequency Level” is used to judge whether the main beam position is on top of bit or on top of mirror.
38	SLOF	I	Sled servo off control input pin.
39, 40	CV-, CV+	I	CLV error signal input pin from DSP.
41	RFSM	O	RF output pin.
42	RFS-	I	RF gain setting and EFM signal 3T compensation constant setting pin together with RFSM pin.
43	SLC	O	“Slice Level Control” is the output pin which controls the RF signal data slice level by DSP.
44	SLI	I	Input pin which control the data slice level by the DSP.
45	DGND	—	Digital system GND.
46	FSC	O	Output pin to which external focus search smoothing capacitor is connected.
47	TBC	I	“Tracking Balance Control” EF balance variable range setting pin.
48	NC	—	No connection.
49	DEF	O	Disc defect detector output pin.
50	CLK	I	Reference clock input pin. 4.23 MHz of the DSP is input.
51	CL	I	Microprocessor command clock input pin.
52	DAT	I	Microprocessor command data input pin.
53	CE	I	Microprocessor command chip enable input pin.
54	DRF	O	“Detect RF” RF level detector output.
55	FSS	I	“Focus Search Select” focus search mode (\pm search/+ search) select pin.
56	VCC2	—	Servo system and digital system Vcc pin.
57	REFI	—	Pin to which external bypass capacitor for reference voltage is connected.
58	VR	O	Reference voltage output pin.
59	LF2	I	Disc defect detector time constant setting pin.
60	PH1	I	Pin to which external capacitor for RF signal peak holding is connected.
61	BH1	I	Pin to which external capacitor for RF signal bottom holding is connected.
62	LDD	O	APC circuit output pin.
63	LDS	I	APC circuit input pin.
64	VCC1	—	RF system Vcc pin.

IC, LC78622ED

Pin No.	Pin Name	I/O	Description		
1	DEFI	I	Defect sense signal (DEF) input pin. (Connect to 0V when not used).		
2	TAI	I	For PLL. Test signal input pin with built-in pull-down resistor. Be sure to connect to 0V. Phase comparator output pin to control external VCO. GND pin for built-in VCO. Be sure to connect to 0V. Pin to which external resistor adjusting the PD0 output current. Power supply pin for built-in VCO. Pin for VCO frequency range adjustment.		
3	PDO	O			
4	VVSS	—			
5	ISET	I			
6	VVDD	—			
7	FR	I			
8	VSS	—			
9	EFMO	O	For slice level control. EFM signal output pin.		
10	EFMIN	I			
11	T2	I	Test signal input pin with built-in pull-down resistor. Be sure to connect to 0V.		
12, 13	CLV+, CLK-	O	Disc motor control output. Three level output is possible using command.		
14	V/P	O	Rough servo or phase control automatic selection monitoring output pin. Rough servo at H. Phase servo at L.		
15	HFL	I	Track detect signal input pin. Schmidt input.		
16	TES	I	Tracking error signal input pin. Schmidt input.		
17	TOFF	O	Tracking OFF output pin.		
18	TGL	O	Tracking gain selection output pin. Gain boost at L.		
19, 20	JP+, JP-	O	Track jump control signal output pin. Three level output is possible using command.		
21	PCK	O	EFM data playback clock monitoring pin 4.3218 MHz when phase is locked in.		
22	FSEQ	O	Sync signal detection output pin. H when the sync signal which is detected from EFM signal and the sync signal which is internally generated agree.		
23	VDD	—	Digital system power supply pin.		
24	SL+	O	Moves the sled to outer circumference.		
25	SL-	O	Moves the sled to inner circumference.		
26	—	—	Not connected.		
27	PUIN	I	CD pickup inner switch detection.		
28	RW	O	Read, write signal.		
29	EMPH	O	De-emphasis monitor output pin. De-emphasis disc is being played back at H.		
30	C2F	O	C2 flag output pin.		
31	DOUT	O	DIGITAL OUT output pin. (EIAJ format).		
32, 33	T3, T4	I	Test signal input pin with built-in pull-down resistor. Be sure to connect to 0V.		
34	N.C.	—	Not used. Set the pin to open.		
35	MUTEL	O	L-channel 1-bit DAC. L-channel mute output pin. L-channel power supply pin. L-channel output pin.		
36	LVDD	—			
37	LCHO	O			
38	LVSS	—			
39	RVSS	—	R-channel 1-bit DAC. R-channel GND. Be sure to connect to 0V. R-channel output pin. R-channel power supply pin.		
40	RCHO	O			
41	RVDD	—			
42	MUTER	O			

Pin No.	Pin Name	I/O	Description		
43	XVDD	—	Crystal oscillator power supply pin.		
44	XOUT	O	Pin to which external 16.9344 MHz crystal oscillator is connected. Crystal oscillator GND pin. Be sure to connect to 0V. Subcode block sync signal output pin. C1, C2, single and dual correction monitoring pin. Subcode P, Q, R, S, T, U and W output pin. Subcode frame sync signal output pin. Falls down when subcode enters standby. Subcode read clock input pin. Schmidt input. (Be sure to connect to 0V when not in use.) Pin outputting the 7.35 kHz sync signal which is generated by dividing frequency of crystal oscillator. Subcode Q output standby output pin.		
45	XIN	I			
46	XVSS	—			
47	SBSY	O			
48	EFLG	O			
49	PW	O			
50	SFSY	O			
51	SBCK	I			
52	FSX	O			
53	WRQ	O			
54	RWC	I	Read/write control input pin. Schmidt input.		
55	SQOUT	O	Subcode Q output pin.		
56	COIN	I	Command input pin from microprocessor.		
57	CQCK	I	Command input read clock or subcode read input clock from SQOUT pin		
58	RES	I	LC78622 reset input pin. Set this pin to L once when the main power is turned on.		
59	T11	O	Test signal output pin. Use this pin as open (normally L output).		
60	16M	O	16.9344 MHz output pin.		
61	4.2M	O	4.2336 MHz output pin.		
62	T5	I	Test signal input pin with built-in pull-down resistor. Be sure to connect to 0V.		
63	CS	I	Chip select signal input pin with built-in pull-down resistor. Be sure to connect to 0V while it is not controlling.		
64	T1	I	Test signal input pin without built-in pull-down resistor. Be sure to connect to 0V.		

IC, LC865516A-5P16

Pin No.	Pin Name	I/O	Description
1	SEG E	O	SEG E control.
2	SEG F	O	SEG F control.
3	SEG G	O	SEG G control.
4	NC	—	Not connected.
5	I-RES	I	Micro processor reset input
6	XT(IN)	I	Connected to an external 32.768 kHz crystal oscillator.
7	NC	—	Not connected.
8	XT2(OUT)	O	Connected to an external 32.768 kHz crystal oscillator.
9	VSS	—	GND.
10	CF1(IN)	I	Connected to an external 5.76 MHz ceramic filter.
11	CF2(OUT)	O	Connected to an external 5.76 MHz ceramic filter.
12	VDD	—	Microprocessor power supply (+5V).
13	I-KEY0	I	Key AD input. (AD)
14	I-KEY1	I	Key AD input. (AD)
15	I-MOTOR	I	Deck status input. (AD)
16	I-CD SW	I	CD door switch status input.
17	O-SHIFT	O	Main clock shift output.
18	NC	—	Not connected.
19	O-BASS LED	O	BASS LED ON/OFF control output. (Not connected)
20	O-QS LED	O	Q sound LED ON/OFF control output. (Not connected)
21	O-SFT LED	—	Not connected.
22	I-DRF	I	CD RF level detection input.
23	I-WRQ	I	CD subcode Q standby input.
24	NC	—	Not connected.
25	I-REM	—	Remote control input.
26	O-CD ON	O	CD power control output.
27	O-TU ON	O	TU power control output.
28	O-P.CONT	O	The main power supply control output.
29	NC	—	Not connected.
30	O-BEAT	O	Beat control.
31	O-MUTE	O	Main mute output.
32	O-DIGIT	O	7-segment LED power supply control output.
33	O-SEG RPEAT	O	REPEAT LED ON/OFF control output.
34	O-COIN	O	CD command output.
35	I-SQOUT	I	CD subcode Q input.
36	O-CQCK	O	CD command/CLK for subcode.
37	O-WRC	O	CD read/write control output.
38	O-DATA	O	Data output to M62349FP.
39	O-CD LED	O	LED ON/OFF control output for the CD function.
40	O-TU LED	O	LED ON/OFF control output for the TU function.
41	O-TA LED	O	LED ON/OFF control output for the TA function. (Not connected)

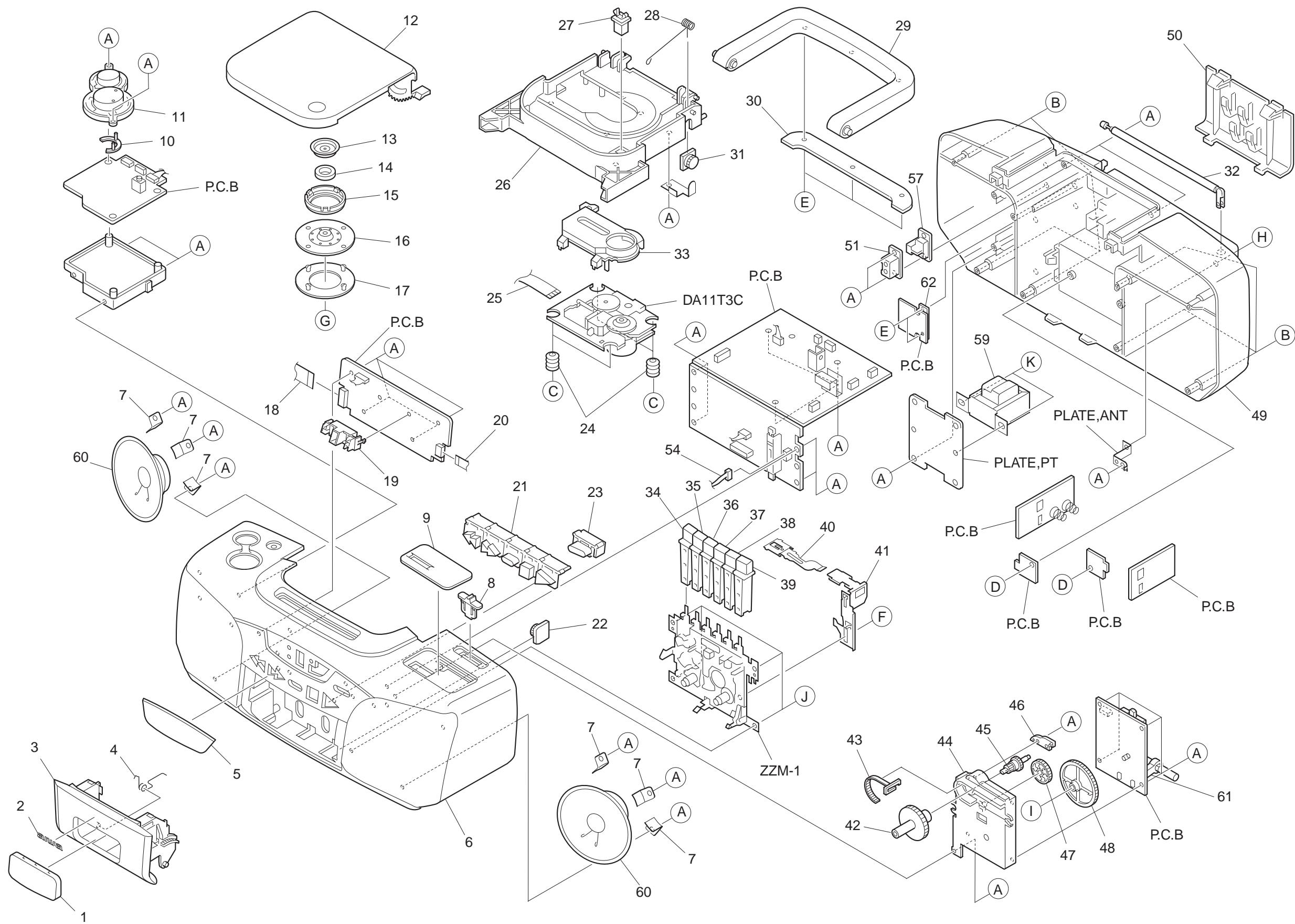
Pin No.	Pin Name	I/O	Description
42	NC	—	Not connected.
43	SEG DP	O	SEG DP control.
44	SEG A	O	SEG A control.
45	SEG B	O	SEG B control.
46	SEG C	O	SEG C control.
47	SEG D	O	SEG D control.
48	NC	—	Not connected.

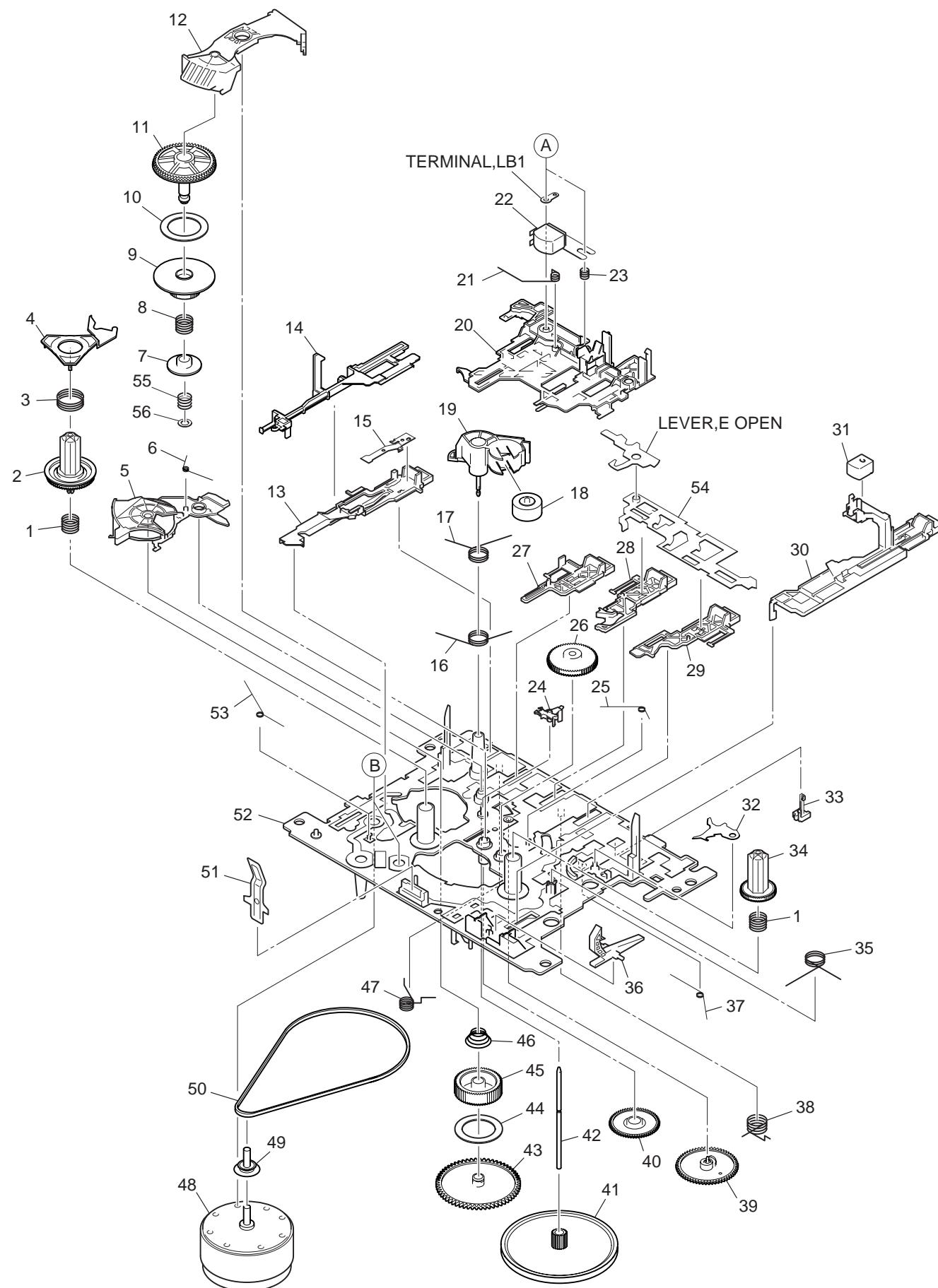
MECHANICAL PARTS LIST 1/1

DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。
If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

COLOR NAME TABLE

Basic color symbol	Color	Basic color symbol	Color	Basic color symbol	Color
B	Black	C	Cream	D	Orange
G	Green	H	Gray	L	Blue
LT	Transparent Blue	N	Gold	P	Pink
R	Red	S	Silver	ST	Titan Silver
T	Brown	V	Violet	W	White
WT	Transparent White	Y	Yellow	YT	Transparent Yellow
LM	Metallic Blue	LL	Light Blue	GT	Transparent Green
LD	Dark Blue	DT	Transparent Orange		



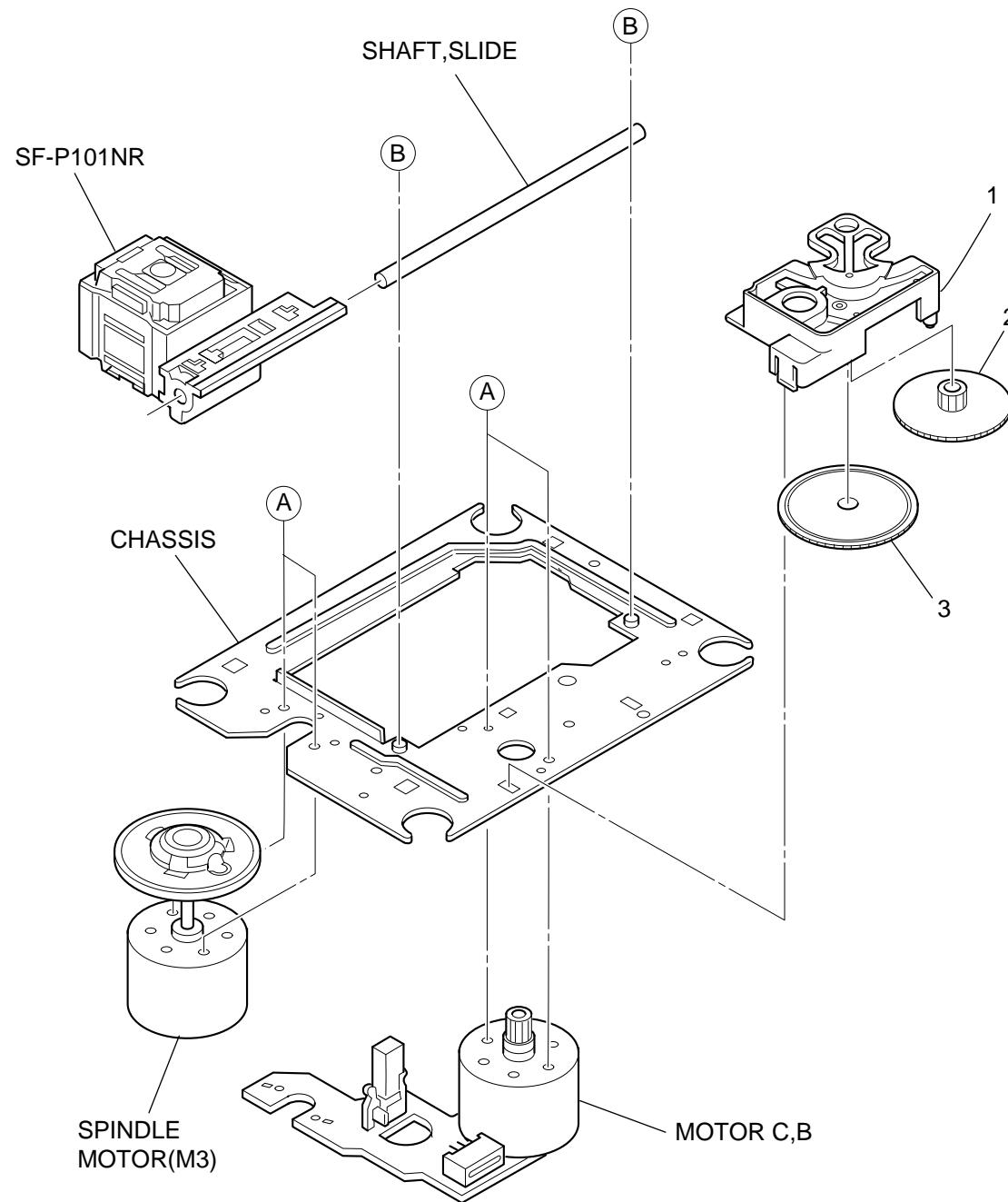


TAPE MECHANISM PARTS LIST 1A

DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。
If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

REF. NO	PART NO.	KANRI NO.	DESCRIPTION	REF. NO	PART NO.	KANRI NO.	DESCRIPTION
1	8Z-ZM1-254-210		SPR-C, REEL R	31	87-A91-533-010		HEAD, EH PH-K380
2	8Z-ZM1-225-110		GEAR, REEL R	32	8Z-ZM1-215-010		LEVER, REC LOCK
3	8Z-ZM1-253-110		SPR-C, AUTO SENSOR	33	87-A91-492-010		SW, LEAF MSW18560
4	8Z-ZM1-217-110		LEVER, AUTO SENSOR	34	8Z-ZM1-226-010		GEAR, REEL L
5	8Z-ZM1-212-110		LEVER, T-UP	35	8Z-ZM1-241-010		SPR-T, PLAY
6	8Z-ZM1-245-010		SPR-T, AUTO	36	8Z-ZM1-220-010		LEVER, REC SENSOR
7	8Z-ZM1-236-010		CLR, SLIP FF/REW	37	8Z-ZM1-249-010		SPR-T, FR
8	8Z-ZM1-252-010		SPR-C, FF/REW	38	8Z-ZM1-242-110		SPR-T, FF/REW
9	8Z-ZM1-230-010		GEAR, SLIP FF/REW A	39	8Z-ZM1-229-010		GEAR, CAM
10	8Z-ZM1-266-010		FELT, FF/REW	40	8Z-ZM1-232-010		GEAR, IDL FF/REW
11	8Z-ZM1-231-010		GEAR, SLIP FF/REW B	41	8Z-ZM1-234-010		FLY-WHL, ZM-1
12	8Z-ZM1-213-010		LEVER, FF/REW	42	8Z-ZM1-267-010		SHAFT, CAPSTAN 2
13	8Z-ZM1-209-110		LEVER, PAUSE	43	8Z-ZM1-228-010		GEAR, SLIP T-UP B
14	8Z-ZM1-222-010		LEVER, E-LOCK M	44	8Z-ZM1-265-010		FELT, T-UP
15	8Z-ZM1-256-010		SPR-P, PAUSE	45	8Z-ZM1-227-010		GEAR, SLIP T-UP A
16	8Z-ZM1-244-010		SPR-T, T-UP	46	8Z-ZM1-251-110		SPR-C, T-UP SLIP
17	8Z-ZM1-247-210		SPR-T, PINCH	47	8Z-ZM1-243-210		SPR-T, STOP/PAUSE
18	8Z-ZM1-261-110		ROLLER ASSY, PINCH	48	87-A91-531-010		MOT, MS15C2L
19	8Z-ZM1-221-010		LEVER, PINCH	49	8Z-ZM1-271-010		PULLEY, MOT ZZM-1
20	8Z-ZM1-205-210		LEVER, PLAY	50	8Z-ZM1-264-010		BELT, MAIN S
21	8Z-ZM1-248-010		SPR-T, BRG	51	8Z-ZM1-260-010		SPR-P, CASSETTE
22	87-A90-403-110		HEAD, RPH MS15R	52	8Z-ZM1-201-310		CHAS ASSY, ZZM-1
23	84-ZM2-227-310		SPR-C, AZIMUTH	53	8Z-ZM1-255-110		SPR-T, E-LOCK
24	8Z-ZM1-216-010		LEVER, AUTO	54	8Z-ZM1-214-010		LEVER, LOCK
25	8Z-ZM1-246-010		SPR-T, AUTO 2	55	8Z-ZM1-257-110		SPR-C, F/R
26	8Z-ZM1-233-010		GEAR, IDL REW	56	8Z-ZM1-275-010		W-L, 1.47-4-0.25
27	8Z-ZM1-208-010		LEVER, STOP	A	84-ZM2-242-010		S-SCREW, AZ1-2-6.4
28	8Z-ZM1-207-010		LEVER, FF	B	8Z-ZM1-270-110		V+2.6 ZZM-1
29	8Z-ZM1-206-010		LEVER, REW				
30	8Z-ZM1-211-110		LEVER, REC 2				

CD MECHANISM EXPLODED VIEW 1/1



CD MECHANISM PARTS LIST 1/1

DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。
If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	S2-121-A28-400		COVER GEAR
2	S2-511-A21-000		GEAR MIDDLE
3	S2-511-A21-100		GEAR, DRIVE
A	S1-PN2-03R-OSE		SCR PAN PCS 2-3
B	87-261-073-410		SCR S-TPG FLT 2.6-6
ALL	M8-ZZK-E90-070		DA11T3C

ACCESSORIES/PACKAGE LIST

DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。
If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

REF. NO	PART NO.	KANRI NO.	DESCRIPTION
1	8A-CDA-906-010	IB,EZ(9L)FM <110EZ(S),100EZ(P),100EZ(L),100EZ(S),110EZ(L)>	PDF
1	8A-CDA-901-010	IB,H(ECA)FM <110HRJ(S),100HE(S),100HRJ(S)>	
1	8A-CDA-905-110	IB,K(E)FM<100K(S),99K(S),170K(S)>	
1	8A-CDL-902-010	IB,LH(ESP)FM<170HA(S)>	
1	8A-CDA-903-010	IB,U(ESF)FM<170U(S)>	
2	8Z-CDK-962-010	RC UNIT,RC-ZAT02(VS) <170U(S),170K(S),170HA(S)>	
▲	3 87-A80-119-010	AC CORD SET ASSY,AZ<170HA(S)>	
▲	3 87-A80-036-010	AC CORD SET ASSY,E W/FLTR VOL <100HE(S),110EZ(S),100EZ(P),100EZ(L),100EZ(S),110EZ(L)>	
▲	3 87-A80-034-010	AC CORD SET ASSY,K W/F MAY-BG <100K(S),99K(S),170K(S)>	
▲	3 87-A80-089-010	AC CORD SET,HC <110HRJ(S),100HRJ(S)>	
▲	3 87-A80-109-010	AC CORD, HK7281 BLU U<170U(S)>	
4	87-A91-017-010	PLUG,CONVERSION JT-0476 <110HRJ(S),100HRJ(S)>	

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